ON HOSPITALS:

THEIR MANAGEMENT, CONSTRUCTION, AND ARRANGEMENTS IN RELATION TO THE SUCCESSFUL TREATMENT OF DISEASE, WITH REMARKS ON THE ORGANISATION OF MEDICAL RELIEF IN THE METROPOLIS.

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II.—THE CONSTRUCTION AND ARRANGEMENTS OF HOSPITALS.

FOR more than a century past the subject of the construction of hospitals has attracted attention, and been discussed and re-discussed by a multitude of able men. Sometimes with scientific precision uninfluenced by personal feeling; often with anger and acrimony; and not unseldom with the profoundest sentiments of sympathy with the sick and suffering, and the most earnest desire to place them in the position best calculated to afford them the fairest chances of life, and restoration to health.

The labours of John Howard in this field are well known; but the first serious attempt to treat the subject with scientific accuracy was that of MM. Tenon and Bailly, when considering the grave defects of the old Hôtel Dieu, and the best means of remedying them. The classical work of the former laid the foundations of the system now being adopted, and is the most valuable contribution ever offered on the question. It is somewhat singular, that after the lapse of nearly a century, the question of the entire removal of the same Hôtel Dieu should again have given rise to prolonged discussions in the Academy of Medicine and the Surgical Society of Paris, and of the official commission appointed to consider and carry it into effect. The conclusions arrived at by the Société de Chirurgie have since guided the action of the most advanced reformers in this direction, as I shall endeavour to show further on.

The Crimean war, the contest between Prussia and Austria after the Schleswig-Holstein conflict, the great war of secession in the United States, and the Franco-German war, again strongly directed the attention of the public and of the profession to the best means of dealing with accidents, injuries, and disease in large bodies of men suddenly collected in overwhelming numbers, so as to avoid the fearful destruction of human life, inseparable from the old methods of managing such matters. The successful application of the arts of peace to the operations of war, was shown in the adoption of the principles so long ago advocated by Tenon.

The removal of St. Thomas's Hospital, the building of the Herbert and Netley Hospitals, the reconstruction of the Edinburgh and the building of the Western Glasgow Infirmaries, and the building of several new hospitals in different parts of England, attest the practical interest in the subject taken by ourselves.

The detailed, elaborate, and excellent report of Messrs. Bristowe and Holmes, with the remarks of the distinguished medical officer of the Privy Council, published as a parliamentary paper, with the writings of Miss Nightingale and Captain Douglas Galton, are still authorities of great value on this important and vexed question.

To attempt to take note of the ground covered by the various contentions in this century of conflict of opinion, would be as unprofitable, as it is impracticable, in a reasonable compass. It is, however, unnecessary. It will be sufficient for my purpose to state the conclusions arrived at, after prolonged discussion in Paris in 1864, inasmuch as they have in the main been observed in the latest hospitals built on the Continent of Europe, and in some of those recently constructed elsewhere, the chief exceptions being the costly failures of the new Hôtel Dieu and St. Thomas's Hospital, the former from a deliberate and intentional disregard of the true principles which have taken so long to establish, the latter from a singular, and not very intelligible misapplication of those principles. With us the deathblow to the aggregate or palatial plan was given by the late Sir James Simpson and Mr. Erichsen; for although the accuracy of the basis of the arguments of the former has been disputed, and the views of both have not obtained the same acceptance with us that they have done in other countries, their practical adoption in the most recent hospitals of Germany, France, and the United States, affords the best possible proof of their accuracy.

It was well said by Léon Lefort, one of the most competent authorities on the subject, that it is sometimes supposed that the question of hospital construction is an easy one, that architectural considerations should predominate, that hospitals should serve for the ornamentation of towns, that they are as easily planned as streets, and that the science of health or hygiene has little to do with them. He disputes the correctness of this view, inasmuch as the best authorities on health and disease have shown, that it demands the application of the most profound knowledge of medicine in all its branches, for its correct understanding.

The celebrated Philibert Delorme, the *protégé* of Catherine de' Medicis, and first architect of the Tuileries, now in ruins, in his "Traité Complète d'Architecture," published three centuries ago, foreshadowed the true principles involved in the construction of hospitals. "It would be better," he wrote, "for the architect to fail in ornamentation, such as columns and facettes, which all study most, than in those rules of nature which tend to the convenience, use, and profit of the inhabitants, and not the decoration, beauty, and enriching of buildings, which are only for the contentment of the eye, and bring no advantage to the *life and health of man*."

Compelled by the exigency of time and space, I pass over other authorities, some of considerable eminence, to come to one who will, I believe, exercise a more permanent influence on the whole question of collective dwellings, than most of his predecessors or contemporaries. I refer to Monsieur C. Tollet, a French civil engineer and architect.

In 1876 M. Tollet presented to the Academy of Sciences in Paris, a memoir concerning the principles which should regulate the construction of collective buildings for both men and animals. In it he states that he was thus inspired by views formulated for more than a century by the most competent hygienists, views which have remained sterile by the united influence of routine and vanity, and by the irrational opinion that the potential voice was that of the constructor in a question of health, touching which the only profession competent to deal thoroughly with it was scarcely considered, and when consulted, disregarded.

M. Tollet has applied his system successfully to barracks, schools, and hospitals. That system, which bears his name, is one of single-storied pavilions, raised on plinths and built in separate blocks on a peculiar form of construction, which, in my opinion, unites in the greatest degree the best sanitary conditions, with the most moderate cost, and the greatest permanent retention of healthy attributes. I shall refer more at length to them when I come to the description of the St. Eloi Hospital at Montpellier, and other institutions of a like character, constructed, or in progress, by him.

I shall not attempt to discuss the difficult and still undetermined problems connected with the causes of the vitiation of the air of a hospital, together with the conditions under which septicæmia and blood-poisoning occur in wounds, and in some constitutional diseases. The existence of such influences cannot be denied. Whether they be due to putrefactive fermentation, the development of germs and living organisms, or any more subtle and less easily detected general agency, is comparatively of little importance in the determination of the question under consideration. The end to be sought is the best means of depriving these agencies of their power of mischief; and this is now admitted to be by placing all institutions in which many persons are congregated under the same roof, whether in health or in disease, in the best possible state to secure the utmost attainable purity of all the essentials of health and life, such as air, soil, water, and the agencies which affect an individual, or may from him extend to other persons, and ultimately infect whole communities. Hence I shall reproduce, *in extenso*, the conclusions arrived at in Paris, for reasons already stated; and after considering the leading features connected with hospital construction, briefly describe such of the most recent, as appear to be best fitted to fulfil their purposes.

The conclusions of the Surgical Society of Paris, after ten prolonged sittings, were as follows :—

1. A hospital should be placed in an open space, upon a dry soil, with an inclined surface. This space should be large. A superficial area of thirty square metres (about thirty-five square yards) for each sick person is the minimum space that should be allowed, and this should be increased as much as possible, and should be augmented progressively with the increase in the number of sick.

2. The air of a hospital will be pure in proportion to its distance from thickly populated places. In the centre of cities hospitals for urgent cases alone, which are necessarily restricted in numbers, and for clinical purposes, should be retained. This measure of health will be at the same time one of economy, as it will allow large towns like Paris, to instal their hospitals on large areas at less cost.

3. Good hygienic conditions are easy to obtain in hospitals of from 200 to 250 sick. These conditions are impossible to obtain, in large towns, if double the amount of these figures is exceeded. Within these limits of numbers, the expense for all purposes, is not in excess of that of hospitals containing larger numbers.

4. The constituents of the atmosphere intermingle chiefly in a horizontal direction; hence the necessity of combating, by increased space, the effects of contact, and of the proximity which constitutes crowding, and the influence of which is communicated from patient to patient, ward to ward, and from one building to another.

5. To strive successfully against contagious influences not only needs an increase of the cubic space allowed to each sick person, but in addition, and above all, demands an increase of superficial area, which is at present insufficient in all our civil hospitals. For similar reasons the multiplication of stories is contra-indicated, as each of them generates a more or less vitiated atmosphere. From a rigorous hygienic stand-point the superposition of stories should be limited to two.

6. It is illusory to believe that a large cubical capacity in wards can replace an absence of external space and aeration, or to suppose that an abundant artificial ventilation can supply the place of either of those conditions. Nothing can compensate for the insufficiency or absence of natural aeration.

7. Buildings completely isolated, and all having the same aspect, freely exposed to light, and to the action of wind and rain, should be placed in a single, or in parallel lines, at intervals of from 80 to 100 metres (rather more than from 85 to 109 yards), so as to secure effective separation and external aeration.

8. Small wards of from fifteen to twenty beds are easy to superintend with care. In them the mutual discomfort of patients, and the chances of direct contagion, are diminished, and the rapid removal of all impurities is increased. They are preferable for the ordinary care of the sick, and do not affect prejudicially the special arrangements required for certain classes of disease, which need more space and the isolation of separate rooms.

9. The furniture of wards should interpose no obstacle to the free circulation of air. Bed curtains should be suppressed whenever it is considered necessary.

10. Wards should be separated by partitions, or rooms devoted to common service. One of them should be used as a day and dining-room for the benefit of all patients able to get up, and thus cause a daily incomplete emptying of the sick-room.

11. The periodical and regular evacuation of all sick wards, and their complete rest for months at a time, have produced such good effects in the military hospitals of France, and in the hospitals of other countries, as to be deserving of general adoption, which is a pressing necessity in times of epidemics.

12. Arrangements should be made to secure that all odorous and infectious matters, dejections, dressings, water used in cleansing, &c., should be rapidly destroyed or removed, and never be allowed to remain within or near the rooms occupied by the sick, or be permitted to cause any perceptible smell.

13. The central administration of the hospitals should be supplemented and assisted by a permanent consulting [advising] committee of health, holding periodical meetings. This committee should consist of physicians, surgeons, administrators, architects, and engineers, with power to call into council all the heads of hospitals, who are not members of the commission.

The periodical meetings of the physicians, surgeons, and administrators of each hospital could furnish valuable advice to the central administration, to enable it to deal efficiently with all measures of progress."

Bearing these conclusions in mind, and knowing that, although susceptible of modification in some circumstances, they were based on a careful examination of the hospital systems of all countries at that time, and of our own in particular, I shall now proceed to consider the chief points which require examination, in any proposal for the building of the hospitals of the future.

These are (*a*) site and surroundings, (*b*) ventilation and warming, (*c*) water-supply, (*d*) the dimensions and distribution of buildings and wards, (*e*) size of hospitals, together with (*f*) furnishing and fitting.

(*a*) SITE AND SURROUNDINGS.

An ideal site for a hospital would be where the conditions of soil, subsoil, drainage, water-supply, and all surroundings were most free from local causes of impurity, and where there were fewest buildings and habitations to exclude or intercept air and light, or to be themselves active agents in the creation of causes of unhealthiness, such as factories, workshops, &c.

Sufficient practical experience and knowledge of the subject have been acquired to show that gravel and sand are more likely to be healthy than clay or any impermeable medium, which needs costly artificial contrivances to get rid of surface moisture and soluble impurities; that a hillside would in most, but not in all, circumstances be preferable to the base of a hill; that an elevated plateau or plain would, in temperate climates, be more advantageous than a bottom or valley, and so on.

But the necessities of the times in which we live, particularly in great cities and centres of industry, compel us to select, not that which is best in itself, but what is procurable at least cost, and the most accessible proximity to those who need it.

In London, for example, most of the older hospitals, which are now in densely crowded, or in unhealthy localities, were, when they were originally built, either in open fields, or so far removed from buildings of all kinds as to be free from most of the reproaches which now attach to them. Each recurring census return in Europe and in the United States shows with what startling rapidity manufacturing and other industrial towns and cities are expanding, and how quickly the centres of population in them are shifting. A glance at the Map which will accompany this paper will bring out in startling relief this fact as respects London. The census of 1871 gave it a population of 3,254,260 inhabitants, occupying an area of 125 square miles, in which the density of the population of the whole area was forty persons to an acre, and in its most crowded and least healthy localities range from 205 per acre in Whitechapel, to 325 per acre in St. Anne's, Soho. The census of 1881 has somewhat changed these figures, as I shall show hereafter. Now, Switzerland, with a population of 3,000,000, is spread over 15,980 square miles; Sweden, with a little more than four and a half millions, occupies 171,000 square miles; Holland, with about four millions, 12,730 square miles; and Denmark, with scarcely half the population of London, 14,760 square miles.

In addition to this extreme pressure of population upon space and the means of subsistence, the Map indicates the present provision of all kinds in the metropolis for sickness in all its forms, and how very unequally it is now distributed, as I shall endeavour to explain when treating of the organisation of its medical relief. The Map will appear in the issue of July the 16th. The same fact is witnessed, although in a diminished degree, in the sixteen towns of the United Kingdom which have a population of more than 100,000, and in the half dozen others which have probably by this time reached that number. This condition must be carefully borne in mind in all discussions on the relative merits of town and country sites, as proper places for hospitals for the use of town populations.

Wherever practicable, general hospitals should undoubtedly be placed in the outskirts of towns, as near as possible to the bulk of the population who require to resort to them; and all convalescent hospitals, imbecile asylums, hospitals for incurables, and similar institutions, should invariably be placed well clear of the town. But, hospitals attached to schools of medicine, and those which are intended for accidents, injuries, and acute cases which will not bear distant carriage, must still be in towns; hence their construction and

arrangements should be so managed, as to minimise the evils inseparable from their position.

Every hospital, wherever placed, should be surrounded by a zone of aeration, unencumbered with buildings or any other cause of obstruction of light and air, to a distance of at least double the height of the buildings.

The interspaces, which should be found in all hospitals in town or country, should not be paved or concreted yards shut in by buildings, but open cultivated gardens, accessible to the convalescent, with shelter from the weather, so as to enable them to be as much in the open air as possible, whenever it is prudent or proper for them to be out of doors.

The aspect of a site, which will determine that of the buildings, should, wherever there is a choice in the matter, be such as to command the greatest amount of sunlight at all seasons. The duration, force, and other conditions of the prevailing winds should also be closely studied, as they now are in France and Germany, and the greatest care should be taken not to place hospitals where those winds blow over parts of country unhealthy, from whatever cause, natural or artificial.

The natural drainage and watershed of the locality should also be noted, together with its geological formation, where there is any choice of position.

(*b*) VENTILATION AND WARMING.

Some authorities seem to think that the healthiness, or otherwise, of hospitals is more a question of ventilation than of any other condition—that, so long as you give to each occupant of a sick-bed an adequate amount of space, cubical and superficial, and renew the atmosphere in which he lives and breathes, to such extent as to remove with sufficient frequency, all obvious and perceptible causes of impurity, without making this admission of itself a source of danger or annoyance—it matters little how many you place in each ward, to what extent you pile story upon story, or whether your hospital be placed in town or country. Some, again, appear to be satisfied that artificial systems of ventilation are of little or no use, and that what is termed natural ventilation is the only sound and efficient means of procuring a sufficient current of pure air, to counteract the unavoidably unwholesome influences of a sick ward. Others believe that dilution of the septic poison is sufficient to rob it of its power of mischief, provided it be carried to a sufficient extent.

I take leave to differ somewhat from all these views. Although not susceptible of strict mathematical proof from any statistical data at our command, there is an abundance of evidence on record, of an adequately exact nature, as regards prisons, barracks, factories, schools, and other institutions in which large numbers of human beings are congregated under one roof, to prove that their healthiness, or the reverse, bears a direct and definite ratio to the numbers aggregated upon a given surface, each having a sufficiency of air for healthy respiration in ordinary circumstances. So true is this, that in many examples known to me personally, in India and elsewhere, a hygeiometric scale of their salubrity might almost have been constructed, based upon the increase or decrease of the number of persons contained in them, all other conditions remaining unchanged.

It is tolerably certain that any one person can bear his own exhalations with comparative impunity, but, that he is liable to be poisoned by those of his neighbours, in an increasing ratio proportionate to their number. To such an extent is this correct, that if it were possible to place every sick or wounded person in a separate cell, and isolate him strictly from all others, the extension of all infectious diseases dependent upon a specific contagium, and all the ordinary forms of septicæmia, might be checked, and possibly extinguished.

The beneficial influence of such separation, was remarkably illustrated by an involuntary experiment performed in one of the prisons under my supervision in Bengal. Towards the end of the Orissa famine, a large number of half-starved, sickly men were sent to a district gaol, on account of certain grain robberies of which they were convicted. When that prison became dangerously overcrowded, they were transferred to another prison in a different district, which had spare room. The majority of these prisoners were placed in fairly ventilated wards, with ample room for each, according to the standard measurement allowed. About 120, however, for whom there was no spare room elsewhere, were put in as many separate cells, having 480 cubic feet of space each, and practically without ventilation, for, although they had open grated iron doors, they were situated in long corridors at right angles to the prevailing winds. A considerable number of the former died from different diseases, but chiefly from diarrhœa; while there was not a single casualty among the latter, who were said to have been the sickliest of the lot on admission, and who were on this account placed in the cells, which had long been known as the healthiest part of the prison in question.

A remarkable paper has recently been published in the *Annales d'Hygiène et de Médecine Légale*,[1] by Dr. Layet, Professor in the Faculty of Medicine at Bordeaux, on what he terms "the co-efficients of aeration, or the renewal of air necessary to prevent the effects of overcrowding in inhabited spaces." The professor contends that the quantity of air to be renewed for a person breathing in a space of 20 cubic metres differs from that required for the same person breathing in a space of 100 cubic metres. In the same manner if three, four, five, or six persons breathe in the same space, the figure of ventilation would not be the same, as if each of them breathed in the whole extent of this space. There is, therefore, no uniform, unvarying figure of ventilation, without reference to the size of the room, and the number of persons breathing in it. He has accordingly prepared a table of the co-efficients of aeration, to show at once the amount of air required to be renewed, in the different conditions of space and number. This is of importance where large numbers of people are assembled in a given space, and shows the considerable amount of air needed for renewal in such circumstances—a fact in harmony with the necessity at all times to counteract the ill effects of overcrowding. The professor has been good enough to send me his table, and the question has been discussed at a recent meeting of the Society of Public and Professional Hygiene in Paris, where it was objected that the method was defective in taking note only of the amount of carbonic acid and aqueous vapour present in an atmosphere breathed by many persons, whereas it is the presence of organic matters, that is really most injurious in such circumstances. True as this may be, the impurity caused by carbonic acid is a factor of sufficient importance to be able to determine in all circumstances, for it is chiefly upon this, that most of the practical rules adopted in ventilation are based, and upon it is founded the doctrine of the amount of cubic feet of air necessary for healthy respiration in all circumstances. Professor Tyndall's lecture on dust, and the labours of Pasteur and others on the nature of organic impurities, are gradually throwing a flood of light upon the whole question, and prove that the fewer the number of sick persons collected in a given space, however perfect the ventilation and other physical conditions, the better, and the more likely they are to escape the consequences of the particular vitiation of the atmosphere which causes blood-poisoning in most of its forms.

The problem, then, to be solved in all questions of ventilation is somewhat complex; hence the difficulty of dealing with it in such manner as to establish a general law applicable to all places and circumstances, as well as to all seasons and climates. From this cause, doubtless, arise the very different plans recommended by the highest authorities, engineering and medical.

The conditions to be secured are the utmost purity of air obtainable; as uniform a temperature as is found to be consistent with the maintenance of health at different seasons, and as rapid a renewal consistent with the above conditions, as will secure that as little vitiated air as possible, shall enter the lungs in each act of respiration. Physiology and chemistry have dealt decisively with the first two factors; and pathology is still engaged in determining what amount and kind of organic impurity are prejudicial to persons in health and injurious in disease, not only in relation to the individual, but to his becoming in turn a focus of infection to others; for it is in this manner that zymotic diseases arise and extend.

The measure of the purity of the atmosphere surrounding a building of any kind, will be that of the air finding its way into it, and its temperature will stand in very much the same relation. Hence the necessity of artificial contrivances to regulate it, in the extremes of heat and cold. But, in so mild and equable a climate as ours, expensive and complex contrivances for artificial ventilation do not appear to me to be needed, as they are in the hospitals of the northern parts of the United States, and in Central and Northern Europe.

All mechanical arrangements for ventilation should include warming, as a measure of economy as well as of com-

[1] No. 25, 4me Série, Jan. 1881.

fort. Not only does the air of a sick ward need to be pure and of uniform temperature, but the floors ought equally to be warmed as they were in old Roman buildings and are in China. There are many ingenious and efficient contrivances for effecting this.

The union, then, of natural and artificial ventilation, the former by means of sash windows, Tobin's tubes, and a multiplicity of simple means of admitting and removing air, the latter by open fires, acting as ventilating shafts, supplemented by the moderate and judicious use of warm water coils, will usually accomplish all that is desired.

To attempt to enumerate the infinite mechanical devices by which all this can be accomplished, is impossible. They may safely be left to the architect and the engineer, for whose guidance there is an abundant literature on the subject, both as to the end to be attained, and the means of securing it.

A point generally disregarded in all discussions on the subject of ventilation, is the purification of the air itself in sick rooms, which constantly contain the elements of their own corruption. These septic agencies may be diluted, and, to a certain extent, removed, by constant and rapid renewal of the hospital atmosphere; but they have a tendency to attach themselves to walls, bedding, &c., and their entire removal is a matter of much importance—so subtle is their action, so difficult their detection, and so imperfect our knowledge of the exact mode of their operation.

The Hindus of every part of India with which I am acquainted have from time immemorial possessed a means of purifying the atmosphere of their rooms and huts, by spreading a light coating of a mixture of earth, containing organic matters, on their walls and floors, which enables them to dispense, to a considerable degree, with ordinary ventilation. The process is called "leoping," and is usually performed by the women of the household. With a view to submit this proceeding to a practical test, I had four cells in the Presidency gaol of Calcutta, each containing 480 cubic feet of air and practically unventilated, carefully prepared. Two of them were limewashed throughout, and the two others "leoped." I had four healthy prisoners locked up in them at night, one in each cell. On opening the cells next morning, the two which were limewashed were stuffy and offensive, redolent of the peculiar animal odour exhaled by native prisoners in such circumstances. The two others were as fresh and as pure, as if no one had slept in them. This led me, as head of the prison department, to direct the application of the principle generally in all the gaols under my administrative control, so far as it was susceptible of direct application to walls, floors, and earthen beds. I also employed charcoal extensively for the same purpose, the purification of the air of prison wards from animal exhalations, and, I had reason to believe, with success. This seems to me to be deserving of careful trial in Europe.

In crowded cities, and in all positions in which the external air is likely to be contaminated by organic matters and malarious emanations, in winter especially, it might be subjected to a certain appreciable amount of purification by being passed through cotton-wool or charcoal.

Some writers have recommended that the walls of all masonry hospitals should be porous, to admit of the penetration of air at all times. This would, however, be attended with the grave disadvantage of their intercepting and retaining septic poisons. Masonry walls should therefore, I am of opinion, not only be absolutely impenetrable, but be coated with some hardened substance capable of being thoroughly cleansed without injury, whenever such a proceeding is desirable or necessary.

In some great hospitals, in addition to the effete air of the buildings generally, that of all watercloseta, sinks, and fireplaces, and all other sources of noxious exhalations, are passed through a great central ventilating shaft, represented by a tall, towering chimney. This does not appear to me to be a safe proceeding, and it may possibly explain the cause of the origin of the sickness, which is said to find its way into houses situated in the immediate vicinity of some of the great hospitals in Paris.

I have dwelt thus at length upon the subject of ventilation because, as I have already mentioned, some eminent authorities regard the whole matter of the unhealthiness or otherwise of hospitals to be mainly a question of this character. Hence also the coining of the barbarous term "hospitalism," which has led to much of the "logomachy" and differences of opinion which have arisen on the hospital question.

The French term "*malaria nosocomiale*" is both more correct and expressive, and if it could be condensed into a single word, such as "nosocom-aër," would be preferable to Sir James Simpson's invention, which is liable to considerable misapprehension, and includes other conditions which have no real connexion with the atmosphere of hospitals.

I assume that the best adjunct of all schemes of ventilation—scrupulous cleanliness—is observed, as it undeniably is in every well-regulated hospital in this country, particularly since the introduction of a higher class of nurses, for it is upon their intelligent and incessant care and attention, that the absence of all noxious agencies from impurities of any kind, of person, place, or appliances, is dependent. Associated with the purity of person and place is that of the disinfection and cleansing of all clothing and bedding, and the immediate destruction of all dressings &c., for which, as a rule, due and proper provision is or requires to be made.

(c) WATER-SUPPLY AND DRAINAGE.

The question of water-supply is one of the greatest importance in relation to the healthiness of hospitals, for if soluble impurities be dangerous to persons in health, their ingestion into the systems of the sick is still more injurious, from their diminished power of resisting disease. The great attention now paid to the subject, and the improved supply and distribution in all our larger towns, secure an abundant, and it rests with the hospital authorities to make it a wholesome, allowance. When hard it should be rendered soft by the Porter-Clark process, and the supply should be constant and practically unlimited, for at least double the quantity needed for the healthy is required for the sick.

Connected with water-supply is that of baths, and in this respect the French and German hospitals are, as a rule, much better furnished than our own. Every large hospital should have a complete system of baths for cleansing and therapeutic use, such as are now found in the University College Hospital of London; and all smaller institutions throughout the country, should be supplied with both fixed and movable baths.

Should the water-supply in country places be obtained from wells, or from storing of rain water, the greatest attention to its purity should be paid. The drainage in towns must be connected with the general drainage of the locality, and exceptional care be taken for the disconnexion of the drains and pipes of all kinds with the wards, by means which are now well known to all architects and engineers. To cause the ventilation of closets, sinks, and lavatories to be connected with great chimneys in crowded localities I hold to be erroneous, and likely to be mischievous, as they are now believed to be. When hospitals of any kind or class are isolated, and unconnected with any general system of drainage, all excretory matters should be strictly dealt with on one of the dry systems in use, and on no account should connexion with cesspools or tanks, or any scheme of sewage utilisation with water, be allowed, unless all such matters are previously disinfected. The more carefully they are deodorised, and, if necessary, as in typhoid dejections, disinfected, the less liable they will be to prove injurious before they are returned to the great natural purifier—the earth—aided by rapid vegetation.

In the construction of all hospitals proper provision for the above purposes should never be neglected, or sacrificed to any false economy, as too often obtains at present.

(To be continued.)

ROYAL COLLEGE OF SURGEONS IN IRELAND.—During the year ending April 5th, 14 candidates were admitted to the Fellowship, 103 received the surgical licence of the College, and 10 the diploma in midwifery. Of the candidates for the Junior Class Examination 94 were rejected, and 40 at the Final Examination. The diploma in dental surgery was conferred on 111 candidates. Among the donations to the Museum may be mentioned that of Mr. Allen, which comprised a valuable collection of forty-eight objects, principally illustrative of the ethnology and natural history of South-west Africa; and a collection of specimens and photographs from Mr. Hillis, on the subject of leprosy. A sum of £25 has been contributed by the College towards the fund now being raised to defray the expenses of the proposed International Medical Congress.

THE PATHOLOGY AND TREATMENT OF DIARRHŒA IN PHTHISIS.

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(Concluded from p. 946.)

Clinical symptoms.—When ulceration is proceeding on a large scale in the intestines the patient complains of thirst and anorexia, the pulse is quick, and there is generally great prostration; the tongue passes from furred through various stages: first it is red at the edges, and furred in the centre; then red all over and glazed; then red with a brown streak in the centre; and, lastly, aphtha appears on it. The diarrhœa is remarkable for its persistency; the motions, especially towards the end of life, are very frequent—sometimes twenty in the twenty-four hours, but this is not always the case, and there may be only three or four daily, the characteristic feature being their steady persistency. They may be checked by treatment, but directly this is omitted, and often in spite of its action, the symptom returns; the stools themselves are very loose and ochrey-coloured, often tinged with blood, and towards the end of life contain small sloughs from the large intestine. They are exceedingly fetid, and the patient appears much exhausted after each action.

The aspect in these advanced cases is well-marked. Owing to the terrible emaciation the face is drawn, the malar bones appear prominent, a hectic spot is generally seen on each cheek, and the expression of the countenance is that of pain, and pain there generally is in the region of the ulceration, or else in the centre of the abdomen. Tenderness is generally to be found if carefully sought for; this of course varies in different cases. The right iliac fossa is the common seat of it in many, and especially in early, instances; but later on it may be detected in the right lumbar, right hypochondriac, epigastric, left hypochondriac, left lumbar and left iliac regions, showing clearly that the whole of the colon and sigmoid flexure are involved as well as the cæcum and lower ileum. Often, too, the detection is rendered more easy by the bowel being distended by flatus. The sigmoid flexure is, in my experience, as often the seat of ulceration as the cæcum, and I have frequently detected this during life, and verified it after death. The wasting arising from the diarrhœa is much greater than in ordinary pulmonary phthisis, and a few days of its persistence will reduce a consumptive, who has previously been gaining flesh, by several pounds.

The question arises, In what part of the intestinal canal does ulceration commence? The experience of post-mortems rather indicates that it commences in the small intestine near the ileo-cæcal valve; but how comes it then that we usually find the process more extensive and advanced in the large intestine? which will, I think, be generally admitted. The answer is to be found in (1) the long retention of the contents of the large intestine, (2) in the disengagement of foul gases in this region, and (3) in the enormous variations in calibre to which this part of the intestine is subject, all of which circumstances favour the spread of destructive or ulcerative inflammation, if once set up. Ulcers in the large intestine may be considered to be placed under most unfavourable conditions for healing.

The temperature varies according to the amount of the ulceration, provided there are no special exciting phenomena in the pulmonary or other lesions. Where the amount of ulceration is small and not advanced in stage, the temperature is not materially affected, as will be shown presently (Case 4); where, however, it is extensive, involving both small and large intestines, there is generally marked pyrexia, often alternated by great collapse. The chief feature, however, is its fitfulness; for one day at 11 o'clock the record may be 97° F., and on the following day, at the same hour, it may show 103° F.; these cases being the least of all amenable to the laws governing the pyrexia of phthisis. It is possible, however, to have extensive ulceration without any diarrhœa, for Dr. Douglas Powell gives a case in the Pathological Transactions, Vol. xix., where ulcers an inch and a half long were discovered in the ileum, and during life the patient had no diarrhœa. Dr. Pollock also mentions some exceptional cases of this sort.

Let us now take two instances of the influence of ulceration on temperature.

CASE 4.—Emma K——, aged twenty-nine, married, was admitted into the Brompton Hospital, Oct. 5th, 1875, with a history of cough and expectoration for one year, and of emaciation and night sweats for nine months. On admission she was much emaciated. Cough very troublesome; expectoration abundant. Yellow tongue, furred. Bowels costive. Weight 8 st. 5 lb. The physical signs were: crepitation sounds over the whole right lung, with dulness over the lower third; tubular sounds audible in the scapular region. During the first three weeks of her stay this patient improved, and gained 2 lb., but at the beginning of November diarrhœa came on, which persisted up to her death on Dec. 17th, the physical signs indicating that cavities had formed in both lungs. The temperature was taken five times a day from Nov. 26th to Dec. 16th, a period of three weeks, and only on five occasions did it reach or exceed 100° F. The following are the averages:—At 8 A.M. 98·2° F.; 11 A.M. 97·9° F.; 2 P.M. 98·5° F.; 5 P.M. 98·8° F.; 8 P.M. 99° F. Maximum, 100·6° F.; minimum, 93° F.

The diarrhœa varied in amount from three to six stools a day, and did not appear to be greatly influenced by treatment, which consisted of astringents applied by mouth and rectum. The patient died Dec. 17th.

Autopsy, twenty-four hours after death.—Lungs: Right had apex adherent, and a large cavity in the upper lobe. The rest of the lung was riddled with vomicæ containing purulent matter. In the middle of the lower lobe was a small well-defined band of miliary tubercle. The left lung contained several small cavities full of purulent matter, and a large quantity of transparent miliary tubercle of recent formation. The small intestine for the distance of three feet above the ileo-cæcal valve was very much congested. A small ulcer existed a few inches above the valve, and several small ones in the cæcum. Here some miliary tubercle was also seen. The liver and kidneys were fatty, and the other organs healthy.

Remarks.—This case shows convincingly two things: 1st, that a small amount of ulceration need not cause pyrexia; 2nd, that tubercle may form in more than one organ, without giving rise to any marked rise of temperature, and in fact with a persistence of subnormal records. There is no doubt that in this case acute tuberculisation as well as suppurative processes were proceeding in the lungs, and tuberculisation in the intestines, but they only served to depress the temperature, and not to raise it. The next case shows the effects of extensive ulceration on the temperature.

CASE 5.—Herbert N. M——, aged nineteen, a clerk, was admitted into the Brompton Hospital on Dec. 3rd, 1878. His father and mother died of consumption; he had suffered from cough and yellow expectoration, loss of flesh, and strength for two years. For the last ten months he had had continuous diarrhœa, accompanied by some pain in the epigastrium, after food. Had night sweats for three months. At present cough troublesome, expectoration abundant and muco-purulent, tongue furred, bowels open two or three times daily, appetite poor; urine acid, containing no albumen or sugar, sp. gr. 1035; weight 6 st. 4 lb. Physical signs: Flattening under both clavicles, dulness and crepitation above the right scapula, and tubular sounds in the first interspace. The diarrhœa persisted, in spite of a variety of astringents and diet having been tried, and on the 25th of January, 1879, well-marked tenderness was noted in the umbilical region. Cavernous sounds were audible at each apex, with crepitation in the lower left lung. The tongue had become red at the edges; the number of stools varied from two to four daily, and were loose and ochrey. On the 30th there was much tenderness in the lower portion of the abdomen, most marked in the left iliac fossa in the region of the sigmoid flexure, and to a less degree in the right iliac fossa. There was still some tenderness, quite separate from the rest, in the umbilical region. From these signs and the persistent diarrhœa I diagnosed ulceration of the cæcum and large intestine, most marked in the sigmoid flexure, with enlargement of the mesenteric glands from secondary absorption. The patient gradually wasted away under the influence of the pulmonary and intestinal lesions, and sank on February 7th.

The temperature was carefully taken five times a day during the last fortnight of his life, and the chart showed records nearly normal in the mornings, with a persistent

pyrexia after 2 P.M. The highest recorded was 103·8° F. This chart, however, proves, as Lebert has shown in other cases, the fitfulness of the temperature in intestinal ulceration. There are several records of 101·5° F. at 8 A.M., once followed by a fall at 11 A.M., and a second rise at 2 P.M. During the last day of the patient's life the temperature fell from 102° F. to 96·8° F., indicating collapse of the vital powers. The following are the averages: At 8 A.M. 99° F.; at 11 A.M. 99·9° F.; at 2 P.M. 100° F.; at 5 P.M. 101° F.; at 8 P.M. 101·1° F. Maximum, 103·8° F.; minimum, 96·8° F.

Autopsy, on the following day.—Lungs: The right had pleura adherent, and contained a large cavity at the apex, surrounded by nodules of tubercle; the lower and middle lobes were congested. The left contained a cavity, with less congestion than the right. Intestines: The small intestine was thin, and the vessels full. Three small ulcers were detected, each about one-third of an inch in diameter, about an inch above the ileo-cæcal valve. The large intestine showed extensive ulceration, chiefly in the lower portions, and most marked of all in the sigmoid flexure, where several ragged ulcers with thin edges were found. The mesenteric glands, especially those lying in the folds of the meso-colon and meso-rectum, were much enlarged. Liver fatty. The other organs were healthy.

This case shows well the effect of extensive intestinal ulceration on the temperature chart, for it is probable the state of the pulmonary lesions was not sufficiently active to have greatly influenced it. The ulcerations were found in the exact positions predicted before death by the physical examination.

The diarrhœa proceeding from lardaceous degeneration of the intestines is not so marked in its characters as that arising from ulcerations. Its clinical features have not as yet been completely drawn, but it may be said to correspond with the colliquative diarrhœa of M. Peter and other French authors. It prevails in the late stages of the disease, is not very profuse, but is persistent, and seems to have some correspondence with the drenching night sweats. The stools are much more watery, and diminish after a profuse night perspiration, the tongue is more furred than red, there is less pain and no tenderness at all in the track of the intestines, but the liver is often enlarged and tender, being affected by the same kind of disease. Diarrhœa from lardaceous disease of the intestines is only to be found (in phthisis) in connexion with great discharge from some mucous surface, or with the profuse expectoration from a large vomica, or from several smaller ones. Protracted diarrhœa, as that due to ulceration, may give rise to lardaceous degeneration of the intestines, so that in many post-mortem examinations we find both ulceration and lardaceous disease present; and the question arises as to which of the lesions the diarrhœa may be attributable. This question is only to be solved by a very careful revision of the clinical history. In a fair proportion of phthisical cases lardaceous disease is present without ulceration, and here we have no difficulty in referring the effect to the proper cause. After death the appearance of the intestinal mucous membrane, especially of that of the small intestine, is pale, and sometimes there is œdema. There is no marked distinction between it and other mucous membranes until iodine is applied, when a number of small reddish-brown points appear. These correspond to the villi whose capillaries and arteries are infiltrated with the lardaceous deposit, and Dr. Green considers that the diarrhœa is due to an increased permeability of the infiltrated vascular walls, which thus allows of a flux. Usually the pancreas, spleen, liver, kidneys, and mesenteric glands are found in the same condition.

The following is an example of diarrhœa arising from lardaceous disease:—

CASE 6.—Kate H——, aged sixteen, was admitted into the Brompton Hospital on Aug. 13th, 1878. History: Chilled by sleeping in a damp bed in December, 1877, and has had cough and expectoration ever since, accompanied by great prostration and marked inanition and night sweats. Had hæmoptysis, a quarter of a pint in amount, in March, and streaked expectoration occasionally since. Diarrhœa has prevailed for the last month. Cough is very troublesome, expectoration abundant and yellow; appetite indifferent; bowels open three times a day; pulse 110. Physical signs: Crepitation is heard over the whole chest, anteriorly and posteriorly; on the right side loud tubular sounds are audible from the clavicle to the third rib; on the left side amphoric breathing and tinkling sounds as low as the fourth rib. The diarrhœa persisted in spite of a variety of treatment, the stools being loose and three to four in number; the cough persisted and the patient gradually lost flesh and died on Oct. 27th. On the 2nd of October a careful record was commenced of the temperature five times a day, and was continued up to the death on the 28th, a period of twenty-five days. During the first fortnight the temperatures were high, even in the morning; in the second period there was a tendency to fall, and in the last two days, which I have omitted as the records were only those of collapse, the temperature fell to 95·8° F., though the diarrhœa did not increase.

Averages.	8 A.M.	11 A.M.	2 P.M.	5 P.M.	8 P.M.
1st period (14 days) ..	99·2° F.	99·6° F.	100° F.	100·7° F.	101·3° F.
2nd ,, (10 days) ..	98·5° F.	98·3° F.	99° F.	99·2° F.	100·2° F.
Maximum ..	102·4° F.	Minimum ..	96·8° F.		

The autopsy showed that both lungs contained numerous cavities secreting puriform matter, and in the left was some fresh arborescent tubercle following the line of the bronchioles, some yellow matter filling the lumen of the small bronchi. The intestines, small and large, were intensely lardaceous, giving strong reaction with the iodine; the liver was enlarged, and both it and the spleen and kidneys were all markedly lardaceous.

Remarks.—This is a fair instance of diarrhœa arising from lardaceous degeneration of the intestine, as no ulceration could be detected, and the whole intestinal tract, in common with other organs, was infiltrated with the material.

Treatment.—The treatment of the first form of diarrhœa need not detain us long, as it consists of simply correcting the dietary and ordering a few doses of alterative and purgative medicine, with some alkali to reduce the acidity. The second form—that arising from ulceration—requires very careful attention. The great point to be kept in view is the healing of the ulcers, and this can only be attained by shielding them from all irritable substances, and by promoting a healthy granulating action. The treatment, in fact, resolves itself into three sets of measures.

1st. Rest in bed and the administration of only such food as can be quickly and easily assimilated without causing much distension of the intestine or accumulation of flatus. Such are chicken-broth, beef and veal tea, milk gruel, blancmange, always combined with liquor pancreaticus, and prepared after the admirable methods of Dr. Wm. Roberts of Manchester. Dr. Jagielski recommends koumiss specially in these cases.

2nd. Warm applications to the abdomen in the form of linseed poultices, turpentine stupes, or hot water fomentations, to reduce the pain and promote a certain degree of derivation to the skin. If the pain be severe, I have found the application of a small blister over the area of tenderness on pressure, as recommended by Dr. J. E. Pollock, very advantageous. I have noticed in some obstinate cases that when the blister has risen, the diarrhœa has been considerably reduced, and pain existing in the abdomen at the time has subsided.

3rd. Internal medicines: When we have reason to believe that the ulceration is slight and confined to the small intestine, the diarrhœa may be treated by bismuth and opium, or by some astringents. The liquor bismuthi et ammoniæ citratis (B. P.) is a convenient form, but not always so effective as the powdered carbonate or the nitrate of bismuth in ten to twenty-grain doses. Dover's powder combined with it in ten-grain doses is often effective. The most powerful astringent is the sulphate of copper in a quarter to half-grain doses combined with half grain to a grain of solid opium. Of the various vegetable astringents I have found tannic acid in four-grain doses to answer best, far better than rhatany and catechu, but in all cases I combine it with a certain amount of opium to reduce the irritability of the ulcers. Indian bael, especially a preparation of the fresh fruit, is often efficacious in checking the diarrhœa if the ulceration be limited. If, however the ulceration attack the large intestine as well as the small, it is obvious that more local treatment is advisable, and recourse should be had to injections or suppositories. The enema opii (B. P.) administered twice a day is sometimes sufficient, and may be strengthened by the addition of acetate of lead, four grains to an injection, or of tannic acid, five grains. This is a small injection, and it is doubtful how far its local effect reaches. Where the ulceration is very extensive, and involves the greater part of the large intestine, an attempt ought to be made to apply the remedies more thoroughly to the mucous membrane; and for this purpose injections of larger amount—from a pint to a pint and a half—may be used, consisting of gruel or of starch, or, best of all, of linseed-tea, and all con-

taining a certain quantity of opium (thirty to forty minims of the tincture). I would specially recommend the linseed-tea, as it appears to exercise the same beneficial effect on the ulcers of the large intestine as it does in follicular ulceration of the throat. One of the most obstinate cases of intestinal tubercular ulceration I ever witnessed yielded to linseed-tea injections, after almost every other treatment had been vainly tried, the ulcers apparently healing, the diarrhœa ceasing, and the patient living for two years afterwards, and dying of pulmonary lesions. In cases where the stools are very fetid, I have added glycerine of carbolic acid to the injection with advantage. In many cases, however, it is desirable to give the large intestine as much rest as possible, and not to stretch the ulcerated mucous membrane through any distension by fluids; in these cases suppositories of morphia (from half a grain to a grain), or of the compound lead one, or of those of tannic acid are indicated, and the treatment of the diarrhœa arising from lardaceous degeneration of the intestine is not very hopeful. Where the very channels of assimilation—viz., the villi—have undergone degeneration, as well as the various structures from which the succus entericus is poured out, it is difficult to see how treatment can restore the lost tissues. Dr. Dickinson's researches show that the loss of alkali is the chief characteristic of the disease. Dr. Marcet's analyses show that the chief chemical feature is deficiency of phosphoric acid and potash, and excess of soda and chlorine, and on this principle we should give phosphates of potash. When, however, the disease has so far advanced as to reach the intestine, it may be considered beyond any effective general treatment. We must be content to restrain the diarrhœa if we can by astringents, the more powerful the better. Tannic acid in from two to four grain doses, with dilute sulphuric acid, sulphate of copper or sulphate of zinc are the most useful, and injections of these substances do some good.

Upper Brook-street, W.

TREATMENT OF COMPOUND FRACTURES AND WOUNDS OF JOINTS BY GLYCERINE AND CARBOLIC ACID.

BY F. C. G. GRIFFIN, M.A., M.B. OXON., M.R.C.S. ENG.,
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As various modes of antiseptic treatment continue to be brought forward, and the most opposite opinions are still held as to their merits, I have thought an account of a few cases that I have treated with the glycerinum acidi carbolici of the British Pharmacopœia, without antiseptic spray or any very elaborate precautions, would be of general interest. And although the number of cases is not large, still the fact that they have all got well has produced a strong impression on my mind of the value of this mode of treatment.

A pipe manufacturer of intemperate habits, who had failed in business and taken to fishing, was engaged in hauling in a net, with others, after dark, when he got his leg caught by a loop of rope and was thrown down, and found himself unable to rise. The fishermen carried him home, but handled him rather roughly, as they thought he was not seriously hurt. When I saw him I found he had sustained a compound fracture of the tibia, at the junction of the lower and middle thirds, and had lost a large quantity of blood from a small wound caused by the upper fragment of the tibia having been driven through the skin. I bound it up temporarily, to arrest the bleeding. After about twelve hours, when the bleeding had at length quite stopped, the temporary dressing was removed, and a pad of lint soaked in collodion applied. This pad remained on for two days, when it became partly detached, and free oozing of bloody fluid commenced from the wound. I now applied a pad of four thicknesses of lint saturated with glycerinum acidi carbolici to the wound, and a few turns of bandage over it, so as to keep it in its proper position. The lint became firmly adherent to the wound, and the next day I applied a larger pad of four thicknesses of lint soaked in the same way over the original pad, so as to keep it still saturated. On the third day afterwards I cut the edges of the two outer layers of the pad next the wound, and removed and soaked them with glycerinum acidi carbolici, and then reapplied them, and then the bandage as before. I will here state that I regard it as of much importance to the success of this plan of treatment not to disturb the layers of lint immediately covering and generally attached to the wound. After this treatment had been continued about ten days, a large blister containing dark fluid formed under the pads and showed at their edges. I now cautiously tried whether the under pad was still adherent, and finding it was not, I removed it and found that the wound had healed. I left the blister exposed to the air, and it dried up in a few days. The remaining progress of the case in no way differed from that of one of simple fracture, and the man ultimately completely recovered. I was informed by this man's wife that previous to the accident he lived almost entirely on beer, and took scarcely any solid food except a little bread, and that if she provided him with a good dinner he used to sell or exchange it for more beer. While he was under my treatment I limited him to a pint of stout daily.

The next patient treated in this way was a boy of about ten years of age, with compound fracture of the tibia, the upper fragment of the bone having been driven through the skin. The glycerinum acidi carbolici was applied on four thicknesses of lint about two hours after the accident, and covered with cotton-wool, and fresh glycerine and acid was applied to the lint daily, without disturbing the layers next the wound. After about ten days the lint was removed, and the wound found to have healed. A speedy recovery followed. The fracture apparatus used was of the same kind as in the following case.

The next patient was a tradesman who had jumped out of a cart while his horse was running away. He in consequence sustained a simple fracture of the fibula and a compound dislocation of the foot outwards, the lower extremity of the tibia being driven through the skin, the sock, and the elastic of his boot against the ground, and the internal malleolus broken off. When he had been conveyed home the bone was still protruding, and the wound could not be got at until his boot and sock had been cut away. The bone, being covered with dirt from the road, was now carefully cleansed, and with the aid of two other surgeons, who had been sent for at the same time as myself, and arrived soon after, an attempt to reduce the dislocation was made. We did not, however, succeed in effecting the reduction until a slice of bone had been sawn off the projecting end of the tibia. After the reduction the limb was placed on an iron back splint, with two wooden slide splints duly padded and suspended from a cradle, the apparatus being of the kind used at St. Bartholomew's Hospital, in the wards of Sir James Paget when he was surgeon there, and supplied by Ferguson, the surgical instrument-maker. About three hours after the accident I syringed out the ankle-joint with a solution of carbolic acid in thirty-nine parts of recently boiled water, and then, after cleaning round the wound, applied a pad of lint of six or eight thicknesses, saturated with glycerinum acidi carbolici, taking care that the upper layers were of sufficient size to project some little way beyond the wound, so as to exclude air effectually, in case of the patient becoming restless. This was then secured by a bandage. The next day all the upper layers of lint were removed, soaked as before, and then reapplied, except the three next the wound, which were left undisturbed. Then over the lint I put a large piece of carbolic acid plaster, and secured it with a bandage. This mode of dressing was repeated night and morning for several weeks, during the whole of which time not more than about a tablespoonful of discharge escaped from beneath the pad of lint. This discharge was of a pink colour, opaque, and nearly solid. The bowels were confined, and pain and starting relieved with tincture of opium, for about a fortnight. After this the patient, who ate heartily his ordinary diet of meat, &c., the whole time, used to sit up in bed and write letters, and keep the accounts relating to his business. After six weeks I gradually reduced the amount of the carbolic acid by adding more glycerine, and when the wound was nearly healed I used spermaceti ointment. He ultimately made a good recovery, and can walk considerable distances with the aid of two sticks.

The next patient was a cabdriver, aged about fifty years. His horse fell down as he was driving, and while endeavouring to hold him up, he was pulled off his seat, and broke his leg. He was then taken to the Weymouth Royal Hospital, distant seven miles from the scene of the accident. On his arrival there, I found that he had a lacerated wound about

three inches long, through which the end of the upper half of the tibia was protruding. After the fracture had been set, and the edges of the wound drawn together, except over the seat of fracture, where, in consequence of the swelling of the leg, the skin would not meet without more force being used than appeared desirable, a pad of lint of about four thicknesses was saturated with carbolic acid and glycerine, and lightly bandaged on. The fracture apparatus used consisted of an iron back-splint, with two wooden side-splints, padded and suspended from a cradle, as in the previous case. Over the pad a piece of carbolic-acid plaster was placed. The next day a fresh pad of about four thicknesses was soaked as before mentioned, and applied over the previous one, and the plaster over them both. This dressing was repeated night and morning for about a fortnight, after which it was reduced to once a day. The man was on ordinary diet throughout, and there was no constitutional disturbance. About a month after the accident the lint next the wound was for the first time removed, and the wound found to have healed, except over the end of the bone, where there was a wound about an inch long, with bare bone exposed. The special treatment was now discontinued, and poultices were used. A little later a thin layer of bone came away, and the wound then soon healed, and the man recovered with a useful leg.

The next patient was a brewer's drayman, a large made and very fat man, accustomed to the free use of the beverages he supplied. His horses started off while he was in a public house, and when he ran to their heads and endeavoured to stop them he was knocked down, and before they could be stopped the front wheel of the dray going over the inner side of his knee, turned back a large flap of skin, and made a lacerated wound that extended into the knee-joint. A surgeon was called, who dressed the wound, put in some stitches at suitable points, and gave the foregoing account on resigning charge of the case. When I saw him a large pad of four thicknesses of lint, saturated with the glycerinum acidi carbolici, was applied over the wound, and kept saturated by fresh supplies on its outer surface renewed daily. For a week or ten days all went well, and no trouble connected with the joint occurred afterwards, but at the end of that time the lint came off and poultices were used instead, the edges of the skin flap being found to be sloughing, and erysipelas of the leg commencing. The erysipelas followed a severe course, as it did also in several other cases that occurred about the same time, but in the end he recovered and returned to his occupation as drayman.

The next patient was a builder's workman, who fell from a scaffold eighteen feet high, thereby sustaining a severe compound fracture of the lower jaw, while another man falling upon him broke his thigh, and the bone coming through the skin wounded the internal saphenous vein, and caused such copious bleeding that the man appeared in danger of immediate death from loss of blood. Under these circumstances a large sponge was bound tightly over the wound, and the bleeding thus arrested. The fracture was then set, a long splint and bandages being used in the ordinary way. The treatment having reached this stage when I first saw the man, who was cold, perspiring profusely, with livid face, and evidently almost dying from loss of blood, I applied the glycerinum acidi carbolici freely to the bandages over the sponge, and then lightly bound over them four thicknesses of lint saturated with it. The next day I removed the lint, cut slits at short intervals in the bandages, and injected the glycerine through them with a syringe and along the upper edge of the sponge, and then reapplied the pad of lint freshly saturated as before. This treatment was continued for a fortnight without disturbing the sponge, after which the sponge was removed, and the wound found to have healed. The man's health improved throughout, and he recovered in about the same time as if it had been a simple fracture of the thigh.

Weymouth.

MR. HUTCHINSON commenced his course of lectures on "The Laws of Inheritance in relation to Disease," in the theatre of the Royal College of Surgeons, on Monday last. This lecture, as well as that delivered on Wednesday, was attended by an unusually large and appreciative audience, the President of the College in the chair. Sir J. R. Bennett, late President of the Royal College of Physicians, several members of his College, and other distinguished visitors were at the first lecture.

ON SOME

RARE FORMS OF DISEASE, ACCOMPANIED BY LESIONS OF TROPHIC NERVES OR TROPHIC CENTRES, AND ILLUSTRATIVE OF TROPHIC CHANGES.

BY WILLIAM ALEXANDER, M.D., F.R.C.S.

DURING the past two years the surgical practice of the Liverpool Workhouse has presented for observation some rare and interesting forms of disease, all probably dependent upon changes in the nerve centres, and all accompanied by changes that are commonly referred to the disordered action of trophic nerves. The first case seems to be unique in the combination of symptoms. It is similar to no other disease described in our best text-books, and its publication is necessary to ascertain whether it has been described before, or if it may be looked upon as an indigenous form of true leprosy.

CASE 1. *Irregular symmetrical pigmentation of the body, accompanied by anæsthesia of the pigmented patches.*—A delicate girl, eighteen years of age, was admitted into hospital in November, 1879, suffering from endo-cervicitis and metritis of gonorrhœal origin. The canal of the os uteri was much contracted, and the disease very intractable. This necessitated a prolonged stay in hospital, and enabled us to test thoroughly the truth of the statements about to be made. Shortly after admission a considerable portion of the patient's body was found to be covered by a yellowish-brown pigmentation. The upper extremities were almost covered by it, with the exception of some white spots at the flexures of the elbows, that by contrast with the skin around appeared almost pearly in hue. The thighs were much less stained, and below the knees only a few fugitive spots could be seen. On each cheek there was a small faint spot. Below the lower lip, and beneath the chin, were distinct median patches, and these two were the only median patches on the body. On the right side the lateral regions of the body were more affected than on the left. On the right the mamma and scapular regions were covered with pigmentations, whilst on the left the same regions were scarcely touched upon. Over the anterior part of the abdomen, at the inner part of the junction of the lumbar and iliac regions, were two deeply pigmented sickle-shaped patches, perfectly alike in hue, shape, size, and location on their respective sides of the body. On the dorsal region a few spots existed between the inferior angle of the scapula and the iliac crest. Across the centre of the left iliac crest lay a long crescent-shaped patch that was just saved from being asymmetrical by some scattered spots on the opposite side of the body. Like the next disease the pigmentation was symmetrical, and did not affect the median line except on the face and neck.

The discolouration might be described as brown, brownish-yellow, or yellowish-brown. There was no infiltration of the skin, no elevation of the affected surface, and no evidence of papillary or fungoid growth. Her dark hair had recently become dashed with about one-sixth of grey. The most important feature of the case remains to be mentioned—viz., an easily appreciable and constant amount of anæsthesia in the discoloured skin. This was tested by numerous observers again and again, and though some patches were more anæsthetic than others it was estimated that sensation to touch was one-third less than normal. The anæsthesia was in some parts not quite coincident with the pigmented areas, but more extensive, and in other places the derangement was more paræsthetic than anæsthetic.

Present condition (Sept. 1880).—The pigmentation has increased considerably, and encroached still further upon the median region of the body. The anæsthesia has also spread with the pigmentation, but is not more intense than when admitted. Patient has during the last three months passed through an attack of secondary syphilis, including a scaly rash on the skin, sore-throat, &c., complicated with ovaritis and metritis.

Previous history.—Patient had (up to a few months before admission) always been an active healthy girl until she caught the disease for which she came into hospital. She had never been out of England, and never had syphilis. When she was five years of age the brownish marks appeared on the back of the left hand, then spread up that

arm, and subsequently showed themselves on the right hand and arm. The subsequent progress of the disease she did not particularly notice, and could not give the chronological order of the appearances of the other spots.

Before making any remarks on this peculiar case, it will be well to compare with it the following example of a disease sufficiently rare in this country to excite much interest on that account alone.

CASE 2.—*Elephantiasis Græcorum relieved by the administration of chaulmoogra oil.* Henry O——, aged forty, a sailor, was admitted into the hospital on September 28th, 1878, with what appeared to be chronic indurated erythematous œdema of the face, and with blisters on the right foot and on both hands. The patient was rather amused at our attention to his face, the redness of which he thought arose from the hot sun and would soon pass away. Simple applications cured the blisters by November 7th, when he was discharged. He was readmitted on November 19th with another and more severe crop of blisters on the feet and hands, and with the skin of his face raised in red shining tubercles. These tubercles only affected the naked (not the hairy) part of his face. Arsenic was at first prescribed without any benefit. On February 25th, 1879, he complained of pains and numbness in the hands, and on stripping the patient the arms, thighs, and lateral regions of his body were found to be covered with dark brown pigmented patches which were distinctly and in some places completely anæsthetic. On admission to the hospital he had no discolourations anywhere. Since his admission he observed them coming, but did not call attention to them as similar spots came three years ago and disappeared without any treatment. As leprosy was now for the first time suspected, a more pertinent inquiry was made into the history of the case, when we found that he had sailed for many years to Australia, India, and other Eastern and leprosy-infected places; that he began to suffer pains in the extremities three years ago, when in Australia; that these pains increased during visits to Calcutta and Rangoon; that at Calcutta he was told his disease was latent leprosy; and that on his last voyage from India to Liverpool, previous to his admission here, the skin of his face became reddened and thickened. He has always been a healthy man, and never had syphilis. The pigmentation on the arms is of a dark or greyish-brown colour, and the pigmented skin is here raised into tubercles, especially over the area of the cutaneous distribution of the ulnar nerves. These nerves can be felt as rounded cords at the elbow, where slight pressure produces a tingling sensation similar to that produced by a sudden and unexpected shock on the "funny-bone." On the rest of his body the anæsthesia and discolouration very closely coincide in appearance, amount, and cutaneous distribution with the case of the girl previously described. The face has a peculiar appearance, the nose, cheeks, forehead, and eyelids being the seat of crimson tubercles, which are streaked with branching purple-coloured vessels, so that his features have at a distance an intense hot glow like that temporarily produced on some people by strenuous exercise on a hot day. Any doubt of the true nature of the disease was removed by a visit from Dr. Henderson of Shanghai, who at once pronounced it "a typical case of true leprosy in the early stage." Gurjun oil was prescribed and persevered in for nearly four months, during which time the disease continued to spread. Cod-liver oil was then tried for two months with the same result. He has now taken chaulmoogra oil for more than a year, and the result has been that the redness and induration have to a great extent disappeared from the face. Anæsthesia is now nowhere to be found; the tuberculisation of the ulnar regions has almost gone, and his pains have long vanished. Blisters have showed themselves once or twice during the year, but they were small. He is now taking eighty drops of the oil daily, which is as much as his stomach will bear. The patient is a very intelligent man, and being aware of the serious nature of the disease co-operates in every way in the carrying out of the treatment. When he gets sick of taking the medicine in one form, he tries it in another, and up to the present time his stomach has borne the drug very well.

Remarks.—Temporary irregularity in the distribution of pigment in the body is a comparatively frequent phenomenon. When anæsthesia accompanies this irregularity the irregularity is almost always one of deficiency rather than of excessive pigmentation. When the irregularity in the distribution of pigment is permanent the same statement is true, except in leprosy, where there is a deepening of the normal pigmentation. In that disease, however, there are also induration and tuberculisation of the skin. Chloasma, vitiligoidea of various kinds, melasma, pityriasis versicolor, and morbus Addisonii resemble the disease in Case 1, as far as the discolouration is concerned; but I am not aware that anæsthesia has ever been mentioned as an accompanying symptom of these diseases. The location of the pigmentation in the girl's case does not correspond with the area of distribution of any of the cerebro-spinal nerves, thus excluding disease of the nerve-trunks after their emergence from the central nerve-substance. There is no evidence of a local cutaneous cause for the anæsthesia. We are, therefore, driven to the central nervous system as the most probable seat of the affection. That the distribution of pigment is under the control of the nerve-centres the rapid blanching of the hair in cerebral disease and by mental anxiety fully testify. G. Pouchet (*Journal de l'Anatomie et de la Physiologie*, 1876–77) has shown by experiments on fishes that the change of pigmentation that often takes place so as to assimilate the hue of the fish to that of its habitat is brought about by reflex action through the optic nerves, and when both eyes are removed the change does not take place. His experiments show that other reflexes than visual may affect the distribution of pigment. But trophic changes and pigmental lesions are supposed to be under the direct control of the trophic and vaso-motor nerves, which are supposed to arise from the grey matter of the cord close to the origin of the sensory nerves. This tract has never been satisfactorily defined, but the almost perfect coincidence of the anæsthetic and pigmented areas in this girl point to an identity of origin; and the reason why pigmentation does not always accompany anæsthesia probably is that the nature of the disease that can produce both symptoms is different from the common degenerations that are accompanied by anæsthesia alone. Case 1 is therefore probably caused by an ascending and descending degeneration of a region in the cord, but the exact position of that region is uncertain. The similarity of this disease with leprosy, as described in Case 2, is so striking, that, having formed my opinion as to the spinal origin of the first, I looked to see if authorities on leprosy had mentioned a nervous origin for that disease. Nothing is said upon the subject in such books as I have had access to; but in THE LANCET of May last there is a report of the condition of the spinal cord in leprosy by S. Tschirew. Danielssen and Boeck in 1848 described a rarefaction of the ganglionic cells of the grey matter with altered consistence and volume of the cord. Tschirew found thickenings, hæmorrhages, infiltrations, and nuclear growths in the cervical region, and throughout the cord lesions, more or less severe, of the posterior roots.

(To be concluded.)

CASE OF RABIES IN A DEAF-MUTE.

BY JOHN TAYLOR, L.R.C.P. EDIN., L.F.P.S. GLASG.

ROBERT H——, aged six, deaf-mute, a bright, agile, healthy boy, was bitten by a stray dog on the 6th of March, 1880. I saw him a few minutes after the occurrence and found two wounds—one two inches long over the right eyebrow, slightly exposing the pericranium, and the other three-quarters of an inch long, over the left eyebrow. They were promptly washed and cauterised, and healed rapidly. The dog was lost sight of, and the meagre information that could be obtained respecting it left the hideous suspicion that it was not in a good state.

Nothing unusual was observed in the boy's demeanour until the 5th of August. On that day there was an absence of his wonted eagerness for play, and a marked increase of his natural timidity. This was followed by a restless night. Next morning I found him in a fitful condition. Seized with sudden terror he would cling as if for protection to some one in the room, or rush off to hide behind the furniture. Being soothed he would sit down quietly and respond with his customary smile and interested look.

August 8th.—Pulse 153; pupils dilated; paroxysms of terror more severe; slight hesitancy in swallowing; remarkable hyperæsthesia—the slightest current of air producing a gasp, a shudder, a shriek, and a struggle, reminding the

onlooker of a timid bather who suddenly gets out of his depth. Any attempt to sponge his face is resented with the utmost fury. Half a grain of acetate of morphia gave uneasy slumber for three-quarters of an hour. Its subsequent administration was ineffectual.

11th.—Pulse 123; distressing dysphagia. He willingly offers to take some beef-tea, but in doing so he suspends it in the mouth, compresses the lips, sucks in the cheeks, raises the shoulders, and moves the entire body in his efforts to swallow. Suspecting the liquid, he wishes others to partake of it, watches them narrowly, and tries the same dish and spoon he has seen them use. Signing for cold water, he clutches the vessel in his own tremulous grasp, spasmodically bites the edge of it at each mouthful, and holds it aloof till the act of swallowing is accomplished. Hallucinations of sight and feeling. Micturition frequent and difficult. Former symptoms aggravated. Half a grain of morphia injected hypodermically gave three hours' restless unconsciousness. Its subsequent administration produced no appreciable effect.

14th.—Pulse 168; great muscular weakness; features contracted; eyes unsteady. Upper part of the face covered with nail-scratches from spasmodic endeavours to protect the eyes from imaginary danger. Expectoration of viscid saliva. Vomiting of small quantities of frothy cream-like fluid. Persistent grinding of the teeth, with occasional dropping of the lower jaw, thus giving the appearance of "biting the air." The patient afterwards sank into a writhing semi-conscious condition, which was varied by convulsive seizures, and short lucid intervals of consciousness. Death from exhaustion.

Besides the evident peculiarities of the absence of disturbance from sound, and the long duration of both the incubative and active stages, it may be worthy of note that the patient could have no suspicion whatever of the nature of his complaint, and that he did not exhibit the slightest symptom of approaching asphyxia.

Cleland, New Zealand.

EXTRAORDINARY CASE OF SUICIDE.

By ROBERT JAMES MORICE, M.D.,
COLONIAL SURGEON FOR THE NORTHERN TERRITORY OF SOUTH AUSTRALIA.

THE following case of suicide which lately came under my notice is so remarkable that I think it ought to be recorded, although I did not myself see the body, and only obtained my information from non-medical witnesses.

E. B——, aged forty-five, gold miner, was a man of somewhat intemperate habits; he would have occasional "bursts," as they are called here—that is, he would be drunk for a week or so, and would then keep sober for a few months. Such had been his habits for some years. For a few days previous to his death it was noticed that he was not drinking, having just finished one of these periodical bouts. On the morning of June 22nd, 1880, his body was found lying dead outside the tent in which he lived. His throat had an incised wound across it two or three inches long, but not deep, the windpipe being uninjured. This wound appears to have been inflicted with a blunt table-knife, which was found, covered with blood and short hairs resembling those of his beard, in a box in the tent. There was a good deal of blood on the floor of the tent. The left hand and forearm were completely severed from the body, and lying beside it outside the tent. Here I shall quote from my informant:—"There were several wounds in the upper part of the ball of the thumb; then the wrist was nearly cut through, only a piece of skin connecting the hand with the arm. Then the arm was cut through an inch or so above the wrist; both bones were cut through, and the hand and wrist separated from the arm. There was a deep ragged wound in the wrist, all the bones of which appeared to be smashed. I counted several distinct wounds on the thumb, wrist, and arm; there must have been over twenty; I counted seventeen separate ones. I imagine he rested his wrist on a piece of wood, and then chopped it, as there were several distinct cuts on the piece of wood, and marks of the blood having spouted out, the cause of death apparently being the loss of blood from the wounds inflicted." The "deep ragged wound" in the wrist is believed to have been a stab with a pointed instrument used for opening preserved-meat tins. The other wounds were evidently caused by a small tomahawk which deceased kept for chopping firewood. The tent where this happened is situated within a few hundred yards of two other tents, but no noise was heard during the night before the body was found, except some slight moans, which one of his neighbours said he heard, but the direction of which he mistook.

At the inquest one witness said that on a previous occasion deceased showed symptoms of mental derangement, but all the witnesses who had seen him shortly before his death declared that he then appeared quite sane.

I have since learned that whenever he was drunk he had a way of repeating the text: "An eye for an eye, and a tooth for a tooth; if thy right hand offend thee, cut it off." But, if it was attempting to carry out too literally this Divine behest that caused his death, we see that he made a mistake and cut off the wrong hand. Also why did he make the attempt to cut his throat, and then stab himself on the wrist? My own impression is that the desire for self-destruction came first, and then, after two ineffectual attempts, his favourite text occurred to him. What makes it more strange that he should have resorted to such a painful mode of suicide is that he must have had a loaded revolver in his tent, in accordance with the invariable custom in this country.

Port Darwin, South Australia.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

WESTMINSTER HOSPITAL.

CASE OF INTESTINAL OBSTRUCTION; ABDOMINAL SECTION; RECOVERY.

(Under the care of Dr. FINCHAM and Mr. MACNAMARA.)

FOR the notes of this interesting case we are indebted to Dr. W. Gristock.

H. L——, aged fifty-two, a cab-driver, was admitted on March 18th, 1881. He stated that he had always been a healthy man. He remembered no previous illness except rheumatism, for which he was treated at a temperance hospital three years ago. He had had occasional rheumatic pains since, but had never been laid up. He was a teetotaler for twenty-six years, but gave this up about a year ago, and had since been a somewhat free drinker, mainly of whisky. He drank rather more than usual on March 16th. He has been married two years, and had one child, three months old, healthy. He had felt slight indigestion for about a week, but was practically well till the morning of March 18th, when after an ordinary breakfast at 9 A.M. he was driving his cab at 10.30, and suddenly felt a severe pain in the lower part of his abdomen and vomited four times. He took some brandy to relieve the pain, and then came to the hospital.

On admission he was a strong, healthy-looking man, but had a somewhat anxious and depressed expression. He complained of pain in the hypogastric region in severe and frequent paroxysms, and also of tenesmus. He vomited frequently. His abdomen was full and tender. There was no external hernia. Temperature 102·4°; pulse 120. His urine was diminished in quantity, but no accumulation in the bladder was found by catheter. The urine was of sp. gr. 1028, and contained no albumen. He was ordered one grain of opium every three hours, which in the evening was altered to one grain every six hours. The abdomen was fomented. Next day patient was no better. The abdomen was tense, full, and excessively tender. The bowels had not been opened. Temperature varied from normal to 101°.

On March 20th he seemed rather quieter, and the vomiting

subsided in the morning for some hours, but again came on about midday. The vomit was now stercoraceous. The bowels were not moved, although the patient was put under chloroform, and a warm-water enema was administered (the tube being passed nine inches up the bowel). In the evening the patient was collapsed, and evidently in an alarming condition. At 8.30 P.M. ether was administered, and Mr. Macnamara made an incision about four inches long in the linea alba, and carefully examined the intestines coil by coil. A knot of intestine was found in the ileum (about two yards from its junction with the cæcum), which gave way with a perceptible slip as the intestines were handled. There was marked evidence of peritonitis, and the intestines were much injected and streaked with lymph. The cavity of the abdomen was cleansed and the wound closed. The operation was performed with strict antiseptic precautions. After the operation the patient was a good deal collapsed, cold and clammy, and he vomited twice. The temperature, which had risen during the day from 98° to 102·6°, fell after the operation to 97·4°. Pulse was 140, very weak and compressible.

On the 21st patient still felt cold, and his skin was covered with cold sweat. He vomited almost continuously, the vomit consisting of clear fluid with curdled milk. Twelve ounces of urine were passed in the twenty-four hours. All food by the mouth was stopped, and nutrient enemata with pepsine were ordered. He passed a slightly better night, but did not sleep more than a few minutes at a time. Vomiting continued urgent. On the 22nd he looked a little brighter. He vomited eleven times during the day. The tongue was rather less dry and somewhat furred. He was still entirely supported by nutrient enemata. Champagne was tried by the mouth, but caused immediate vomiting. Ten ounces of urine were passed, but the bowels had not moved. Next day he was decidedly better, and able to take champagne and Brand's essence by the mouth. He passed forty-five ounces and a half of urine, and after one of the nutrient enemata a small quantity of slightly fæcal fluid returned. He slept pretty well, and on the 24th was better. Tongue red and irritable. The patient had a troublesome cough, and in the evening twice vomited some thick mucus. Bowels not opened, but much flatus passed. Twenty-six ounces of urine passed in the twenty-four hours. Temperature 98·4° and 100·4°; pulse 104. The wound was dressed, and its edges were found rather red and inflamed. The abdomen was flaccid. On the 25th the patient was free from pain and sickness. The bowels were freely opened, large extremely offensive motions being passed. From this time the man made a rapid recovery. He was allowed to take bread-and-milk on the 29th, but this had to be again stopped for a day or two on April 1st, owing to a slight recurrence of vomiting with diarrhœa. There was again a little diarrhœa on April 17th and 18th, which, however, was readily controlled. The wound after the first few days gaped, and the stitches cut through the skin, and after one further attempt to close the wound by harelip pins it was allowed to heal by granulations, tension being relieved, and the edges kept in apposition by strips of plaster. The patient was sent to a convalescent home on April 23rd.

LONDON HOSPITAL.

LACERATED WOUND OF KNEE-JOINT; LISTERISM; RECOVERY WITH MOVABLE JOINT.

(Under the care of Mr. RIVINGTON.)

THE following case further exemplifies the value of Lister's method in wounds of joints.

J. W——, aged sixty, a dock labourer, was admitted into the hospital on the 22nd of March, 1881, with a lacerated wound on the inner side of the right knee, caused by a blow from a plank. On examination, under the carbolic spray, Mr. English, the house-surgeon, found that the soft parts were much bruised, and that the lacerated wound, which was two inches and a half long, extended from the condyle of the femur to the inner tuberosity of the tibia downwards and forwards, and communicated with the cavity of the knee-joint, allowing the finger to pass under the patella. The wound and joint were thoroughly syringed out with carbolic solution (1 in 20) and dressed antiseptically after Lister's method. A back splint was applied to the limb.

March 23rd: Knee redressed; bruising and swelling more marked; temperature 101°; not much discharge; patient comfortable.

24th: Discharge still aseptic; some effusion into the joint, best felt on either side of the patella; patient doing well. From this date the patient progressed most favourably. The temperature rose to 102° during the evening of the 25th, and afterwards fell gradually to normal. The patient remained free from constitutional disturbance and local complication.

On April 11th the wound was nearly healed, and the patient was able to flex the knee without difficulty.

On the 30th there remained only a very small superficial surface presenting healthy granulations, remains for cicatrisation. The knee-joint was freely movable. Patient was discharged a few days later.

THE QUEEN'S HOSPITAL, BIRMINGHAM.

TREPHINING FOR EPILEPSY.

(Under the care of Mr. J. F. WEST.)

AT a meeting of the Royal Medical and Chirurgical Society, held Nov. 25th, 1879, Mr. West read a paper on Trephining for Traumatic Epilepsy, which the Society published in Vol. lxiii. of the Medico-Chirurgical Transactions.

The girl, whose case was there reported, has had no fit since then, nor in fact any since Nov. 25th, 1879, the date of the operation. She was recently brought before the members of the Midland Medical Society, in order that they might judge for themselves how much her mental condition had improved, and how well she was able to answer any questions that were addressed to her. The undoubted success which attended the use of the trephine in that apparently idiotic, epileptic patient induced Mr. West to resort to it again in a second case; and although the result has not been so satisfactory, Mr. West thinks it would be unfair to place the success on record and to omit all mention of the failure. The traumatic origin of the epilepsy in this case was very doubtful, and operation was consequently less likely to have a curative effect. Mr. West brings this second case of trephining for epilepsy under the notice of the profession, merely because it illustrates the good results of antiseptic treatment in this operation, even when trephining does not cure epilepsy.

Eliza P——, aged twenty-five, single, was admitted into the hospital on March 4th, 1880, under the care of Dr. Heslop. She had one fit when five years old, four days after having a burn on her head. About nine years since she had enteric fever, and during convalescence rheumatic fever. Two years after this she had another fit. Since then she had had a succession of fits, never at a longer interval than twelve weeks. For the last twelve months they have come on every week. Since she was under medical treatment the fits had diminished in severity, but not in number. The fits were worse at her menstrual periods. At the age of nine she had a severe injury (a cut) on the upper part of the forehead, which was some weeks suppurating. She had passed several tapeworms during the last two years.

On admission she was a stupid-looking girl, whose stupidity was confirmed when she spoke. Over the upper part of the forehead and a little to the right of the middle line was a transverse cicatrix, which was adherent to the bone, and at the right end of the cicatrix there was a slight elevation of bone, as though at that point the periosteum had been thickened. There was no loss or impairment of motor power. The general health was fairly good. She was ordered thirty grains of bromide of potassium, with ten of bromide of ammonium, twice a day, and this treatment was pursued, though without benefit, until March 27th, when she was transferred to Mr. West's care. Although the case seemed to be rather one of idiopathic than of traumatic epilepsy, Mr. West decided to resort to trephining, being induced to do so by the fact that various methods of internal treatment had been adopted prior to her admission into the hospital without success, and also that the treatment by the bromide of potassium ordered by Dr. Heslop had not diminished the epileptic attacks while at the same time there was some thickening of the periosteum over the frontal bone at the seat of a severe injury. Moreover, it was thought that possibly the mere relief of intracranial pressure might at any rate diminish the epileptic attacks, as it had done in Eleanor H——'s case.

On March 27th, 1880, Mr. West trephined antiseptically at the site of the cicatrix, about an inch and a half above the middle of the right eyebrow, removing a disc of bone, which appeared in every respect normal, the periosteum alone being thickened, as large as a shilling. The crucial incision in the skin was brought together with silver, and that in the periosteum by catgut sutures; a small drainage-tube was inserted at the bottom of the vertical incision, and the usual Listerian antiseptic dressing applied. The wound was dressed the following day, when it was found to be free from redness or swelling. Temperature 100·8°; pulse 104; respiration 20.

On the 29th the silver sutures were removed and the edges supported by plaster straps. Slight serous discharge; wound nearly healed. Pulse 120; temperature 101·8°; respiration 22.

On the 31st the wound, which was sound except at the angles, was again dressed antiseptically. She had the epileptic aura, but no fit. Temperature 99·8°; pulse 88; respiration 20.

On April 7th the wound was all but healed. Antiseptic dressing was discontinued, and boracic ointment was applied. Temperature 98°; pulse 90; respiration 16. She had a slight fit at 4 P.M. for the first time since the operation, an interval of ten days.

On the 10th she was ordered thirty grains of bromide of potassium with twenty drops of tincture of hyoscyamus three times a day. She had a recurrence of fits on the 16th, 21st, and 30th of April, and on the 2nd, 6th, and 15th of May. The wound healed, practically without any constitutional disturbance, in twelve days. No benefit, however, resulted from the operation; the fits were no less frequent, and the mental condition of the patient became more impaired. A sort of religious monomania possessed her, and, no further treatment appearing likely to benefit her, she was discharged on May 20th.

On Oct. 28th, 1880, she was sent to the Borough Lunatic Asylum, her condition being considered dangerous. She had evinced strong homicidal impulse on various ocasions, at one time having taken up a knife and thrown it at her mother, while on another occasion she tried to put a younger sister into a tub of water. She said that the impulse to do something of the sort came upon her suddenly, and without her being excited or annoyed in any way, and that she was unable to control it. In the intervals between these attacks she was grieved at what she had done, and was rational, but had gloomy and morbid views about religion. The mother stated that the fits had been less frequent and less violent since the operation, but that the symptoms of mental alienation which had existed prior to it had been in no way benefited, and that she had at last come to the conclusion that she ought to place her daughter under restraint.

On Dec. 12th, in company with Dr. Lyle, Mr. West visited the patient, who was then at the Borough Lunatic Asylum, but found her in no way improved. She had fits badly about the menstrual period, and also at intervals of a week or ten days at other times. Dr. Lyle had given her bromide of potassium in large doses since she had been under his care, but without benefit, and he entertained no hope of her recovery.

Medical Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

Urticaria Tuberosa.—Treatment of Simple Fractures and Dislocations of the Bones of the Leg by the immediate application of Plaster-of-Paris Splints.—The Pathology of Acute Periostitis.—Vascular Tumour of the Face.

THE final meeting of this Society for the session was held on the 14th inst., Timothy Holmes, Esq., vice-president, in the chair. In contrast to the condition of things a month ago, when no meeting was held owing to the absence of any papers, there was more material before the Society than could be dealt with in the allotted time, and one paper had to be read in abstract. The chief subject debated was the immediate treatment of fractures of the leg by plaster-of-Paris splints, the plan being strongly advocated by Mr. Croft in a paper on the subject, in which he described a new form of applying the method, which he practically demonstrated at the close of the meeting.

The first paper read was by Mr. MORRANT BAKER, on "A Case of Urticaria Tuberosa, with Unusual Symptoms," of which the following is an abstract:—The case related is that of a man, thirty-three years old, who had suffered from a peculiar disease of the skin for about two years, and for nearly a year had been under the care of the author at St. Bartholomew's Hospital, both in the out-patient department for diseases of the skin, and as an in-patient. The general symptoms from which the patient suffered were those of factitious urticaria, to which were added those of so-called urticaria tuberosa. The most peculiar feature of the case, however, and one which in the author's experience was unique, was the presence of persistent yellowish-red tubercles in various parts of the body, which proceeded to ulceration, the parts most affected being the knuckles, elbows, and ears. These tubercles are said to have begun in a manner similar to that which characterised the onset of the evanescent urticaria wheals and tubercles. The patient's general health was good, and he had not suffered from syphilis or other serious malady. Under the influence of treatment as an in-patient the disease became rapidly better, but soon relapsed when the patient left the hospital. The author considers briefly the doubtful relationship of the disease to others less rare, which in some respects resemble it, and comes to the conclusion that the case is one of so-called urticaria tuberosa, and that the persistency of some of the tubercles and their ulceration may be due in part to the unfavourable circumstances in which the man was placed from the loss of his occupation. A drawing of the case was shown.—Dr. CAVAFY suggested that the permanent ulcerating lesions might be due to chilblain complicating the urticarial condition, for these lesions existed mainly on the knuckles, elbows, and ears, the seats for chilblain, which they resembled in many respects.—Mr. MORRANT BAKER, in reply, said that he was glad of the suggestion, but the tubercles in question were at their worst in the month of July, and had, moreover, existed for two years. This persistence was against the view that they were of the nature of chilblains.

A paper was then read on the "Treatment of Simple Fractures and Dislocations of the Bones of the Leg and Foot by the immediate application of plaster-of-Paris Splints (lateral)," by Mr. JOHN CROFT. Opportunity is taken by this paper and demonstration to, first, reaffirm that it is not only safe, but beneficial, to apply plaster-of-Paris splints (lateral) immediately for simple fractures of the bones of the leg and foot; second, to demonstrate the particular method of applying these splints, and how quickly and easily they may be put on; and, third, to elicit observations on the practice at the various hospitals with regard to the immediate treatment of fractures of the leg and foot. The author's experience, of five years' duration, is decidedly in favour of covering the injured or swollen part immediately; only the most severe cases of contusion and subcutaneous laceration are excepted. The special advantages claimed for these splints, as made and used for the author at St. Thomas's Hospital (for particular description of which see THE LANCET for June 8th, 1878), are uniform pressure; complete fixation of the broken bones and injured muscles; perfect adaptation to the limb and maintenance of extension; diminution of risks of pressure, sores, pains, or excoriations; diminution of risks of delayed union; facilities for quick removal and reapplication; comfort to the patient; freedom of movement allowed to the patient; simplicity and cheapness; economy of time and trouble. The author desires to popularise the use of these splints, because he has found them during five years' constant experience of great benefit to patients, attendants, and surgeons.—Sir JOSEPH FAYRER said that in the previous week he had seen the Army Hospital Corps at work at Aldershot, and had been struck with the rapid and efficacious manner in which the Bavarian splint-bandage was applied. Two pieces of flannal were moulded to the leg, the inner layer secured by pins, and the plaster spread between the layers. In five minutes a perfect splint was obtained, the pins, temporarily securing the inner layer of flannel, being removed. This splint could be opened out so that the leg could be inspected, and it seemed to him most convenient for the purpose.—Mr. HOLMES questioned the accuracy of the inferences drawn from the tables accompanying the paper, with the view to show the practice in vogue at various hospitals in treatment of fractures. The return from St. George's Hospital was not accurate, so far as his own practice was concerned, for he was constantly in the habit of having such fractures put up in immovable splints, the patients going out in a few days instead of weeks after admission. He

agreed with Mr. Croft as to the general benefit derived from immediate treatment, and did not think this was so little recognised as the author inferred.—Mr. HEATH asked if Mr. Croft deemed the practice a novel one. It was the same plan as that adopted many years ago by American surgeons, and the Bavarian method was well known to be a good one. As the author had said, the principle was adopted at the University College Hospital, and at other hospitals too. He himself preferred the plaster-of-Paris bandage, which took a shorter time and gave better results than other measures. The great point was to swathe the limb in cotton wadding (preferable to cotton-wool, which adheres to the plaster) before applying the bandage. This method is strongly upheld in a small but very practical book by the late Mr. Cowling of Louisville, entitled "Aphorisms on Fractures." Mr. Heath said that he invariably treats fractures of the thigh in children with this bandage, which has the further advantage of being able to be varnished when dry. Again, in fractures of the patella he found the best results to follow the application of this bandage, the effused blood in the knee-joint being first withdrawn by the aspirator. In that way good and firm union was ensured.—Mr. HOLMES said that the form of immovable apparatus he employed was composed of splints of thick pasteboard, over which a starched bandage was applied. He preferred this to the heavier plaster-of-Paris bandage, and it was quite as efficacious.—Mr. GANT pointed out that the closed immovable bandages were only applicable to cases which were seen very shortly after the injury; when (as usually happens) the case is not seen till a few hours after the fracture has occurred, the pain, swelling, spasm, &c. rendered such fixed bandages unbearable; but they could be borne later in the case.—Mr. WALTER PYE thought it would be generally conceded that simple fractures of the leg could be treated as out-patients by the use of stiffened bandages; and he preferred the old-fashioned gum-and-chalk bandage for this purpose. It was elastic as well as stiff, so that it yielded slightly; whereas the plaster-of-Paris was heavy, and liable to become brittle. The use of gum and chalk was much advocated by the late Mr. Smee, and its advantages did not seem to be sufficiently appreciated.—Mr. WILLETT said there was no novelty in the principle, although there was in the particular method adopted by Mr. Croft. When he was a pupil at the Brighton Hospital, twenty-five years ago, it was customary to treat simple fractures of the leg by splints, composed of interlacing bandages, stiffened on each side of the limb by a mixture of white of egg and flour. In two or three days a layer of wool and starched bandage was substituted. There were two points which should be carefully considered by those who were in the habit of putting up the bulk of cases of fracture on this principle. He had seen a case where gangrene had resulted, and quite recently had met with a badly set Pott's fracture with considerable deformity in a patient who had been so treated. The great difficulty in this treatment was in some cases of Pott's fracture, or in cases where there was much mobility, where it was not easy to secure such apposition of the fragments as to justify the permanent putting-up of the limb. The same difficulty occurred in oblique fractures, with great tendency to displacement. He asked whether Mr. Croft, in saying that the fractures were put up on the "first visit of the surgeon," implied that he himself applied the splints, or whether this was done in his absence by the house-surgeon.—Mr. ARTHUR DURHAM said it was a great mistake to treat all fractures in the same way; the plan which was best in one case was not the best for another. In some cases the immediate application of plaster-of-Paris was the best, but in others it was the reverse—as in a case, now in Guy's Hospital, of extreme deformity from a badly set fracture which had been put up in another hospital in plaster. Referring to Mr. Heath's remarks about the immediate treatment of fracture of the patella, he himself had excellent results from the use of back splints and plaster. Good results are not due to any particular method, but to the degree of skill and judgment with which the method is applied. A great objection to the immovable permanent bandages was that the surgeon could not see what was taking place during the process of union; and he had often seen this objection practically exemplified when such bandages had been opened. As a general rule, it was a good plan to keep the fractured limb under view until one was sure that firm union had taken place.—Mr. HENRY MORRIS asked Mr. Croft whether the plaster splints were only applied as high as the tubercle of the tibia; for it was generally believed, especially in cases of oblique fracture in the upper and middle part of the leg, to be important that both knee and ankle-joints should be fixed.—Mr. CROFT, in commencing his reply, read a letter from Mr. MacCormac (who was unavoidably absent), in which he said that he had found the plaster-of-Paris splints so satisfactory that he had been in the habit of using them for years. He uses narrow strips anteriorly and posteriorly, secured by a bandage soaked in the plaster, which bandage is cut if the limb has to be unpacked. When the swelling subsides he opens the splint and applies another bandage round it. He advocates the application of the plaster next to the skin. Dr. Yandell of Louisville had also written to the same effect, and spoke emphatically in favour of the immediate treatment by plaster splints. Mr. Croft said that there had been less objection to the immediate application of the splints than he had expected. He apologised if he had erred in basing his inferences as to the treatment in other hospitals from returns published by the registrars. He claimed no novelty for the principle, but he claimed that since its introduction it had been the means of revolutionising the practice at St. Thomas's Hospital. It mattered little whether flannel or cotton wadding was used underneath the plaster. He had adopted with advantage the plan referred to by Mr. Heath of a preliminary aspiration of the knee-joint of serum and blood in fracture of the patella. The house-surgeons put up the fractures, and they had always been sufficiently enthusiastic and intelligent to carry the method out without mistakes. By the aid of chloroform there was no excuse for the surgeon not putting up a Pott's fracture or an oblique fracture at once, and whether the limb were swollen or not it should be put up in the plaster material, which would soon set. If the fracture were properly set it could not be disturbed, and the surgeon would be perfectly confident that when viewing the limb six weeks later it would be in the same position as when first put up. Unfortunately, accidents will happen; because there is good surgery and bad surgery. Some men, with every material at their disposal, can do nothing; for much depends on individual skill. The apparatus he advocated was perfectly simple, cheap, easy of application and efficient, and it gave absolute rest to the limb from the time it was first put on until it was taken off. In reply to Mr. Morris, he said that practically the splint was often carried above the knee; for it is good practice to fix both joints. The Bavarian splint described by Sir Joseph Fayrer was admirable; it was one of the stones in the foundation of the splint he had described.

A paper by Mr. C. T. DENT, on the "Pathology of Acute Periostitis," was read in abstract. The exact relation which acute periostitis and osteomyelitis bear to each other, as well as to the articular affections with which they are so often associated, have long been matters of dispute, so also have their effects with regard to the extent of necrosis, which usually follows. French and German writers hold generally that total necrosis of the shaft will not take place unless osteomyelitis has been present as well as periostitis. This view is not shared for the most part by writers in this country, and cases are on record where the removal of the entire diaphysis has been performed for the results of acute periostitis alone. The exact tissue where the changes commence in acute periostitis is also a subject of difference of opinion; some German writers especially hold that it commences in the outer cellular layer of the periosteum, and destroys the fibrous layer by suppuration. This is, however, but one form of the disease frequently seen about the lower third of the femur, and also in true whitlow (panaritium periostale). More commonly it begins in the deeper osteogenetic layer, and raises up the periosteum from the bone. This may lead to osteomyelitis, and is sometimes, though not commonly, associated with affections of the neighbouring joints. Acute idiopathic osteomyelitis as a primary affection is rare in this country. In examining microscopically the periosteum in a case of acute periostitis, unaccompanied by osteomyelitis, the author found that the inflammatory changes were chiefly situated in the deeper parts; the fibrous layer was intact, though infiltrated, and new bone was developing in it. There was no active inflammation of bone or medulla; the changes observed in the latter the author considered to be due to disintegration and breaking down of the tissues, owing to the cutting off of the vascular supply. The leg, in this case, had been amputated on the nineteenth day. Other specimens showed that the inflammation spreads from the outer to the deeper parts, chiefly around the smaller

vessels. The author remarks that usually, no doubt, when these cases are met with it is not uncommon to find periostitis, ostitis, and osteomyelitis all existing together, yet it is none the less important to distinguish them from each other as far as possible, and also from the form of disease attacking the outer cellular layer of the periosteum, for when modified by early treatment the ultimate results are very different.

Mr. CLEMENT LUCAS exhibited a remarkable case of Vascular Tumour of the Face, which had been under treatment for three years, and was gradually increasing. The patient, a man twenty-eight years of age, was healthy up to the age of eighteen, when the swelling began on the right cheek, beneath the eye, with much pain, attributed to carious teeth, which were extracted. Three years ago a pulsating tumour reached from the ear to the side of the nose and upper lip, and from the orbit to the jaw. A harsh bruit was heard over it. Mr. Lucas tied the external carotid (with difficulty owing to the large size of the veins), and the pulsation ceased for some weeks, then recurred, and the tumour increased in size. Electrolysis was then tried —first with one pole within and the other outside the tumour, and then both inside. Some consolidation followed, but was not permanent. Then galvano-puncture, which produced considerable bleeding. Then he tried excision of some portion; but most profuse hæmorrhage, to the extent of two pints, occurred, and fourteen or fifteen ligatures had to be used. The coronary artery had been tied, and the galvanic cautery used, and altogether he had operated fourteen times. The eyeball is now projecting, and the whole side of the face is occupied by the vascular mass. He had brought the case to have suggestions from the Fellows as to further treatment. He had not tried injections, fearing ill results, for he had seen a child die suddenly after the injection of a nævus.—Mr. HOLMES would shrink from the dangers of injecting any material to promote coagulation in a growth so closely connected with large veins, and suggested that some of the larger vessels, veins as well as arteries, entering the mass, might be ligatured, and that in the rapidly growing portions the galvanic wire might be passed into and beneath the tumour in various directions, so as to produce cicatrices in all parts. The late Mr. Travers, jun., once brought such a case to St. George's Hospital, and treated it on this plan, hæmorrhage having taken place. The patient remained well for some years, then the bleeding recurred, and the carotid was ligatured to check this; but the man died of hæmorrhage whilst the ligature was still on.—Mr. H. MORRIS saw the case eighteen months ago, and suggested that, in addition to tying a large vessel entering the growth, the left external carotid should also be tied, owing to the free anastomoses which exist between the two sides. If at the same time continuous cold was applied by means of Leiter's tubes, coagulation might be promoted. The efficiency of these tubes was well seen in a case of a vascular thyroid tumour now in the Middlesex Hospital, under the care of Dr. Douglas Powell, and the same application had caused remarkable reduction of a lymphadenomatous mass in the axilla and above the clavicle in a patient under Mr. Morris's care.—Mr. LUCAS asked whether ligature of the common carotid would be advisable, seeing that the chief supply seems to be from the ophthalmic artery.—Mr. HOLMES thought it better to wait for more decided evidence of the implication of the ophthalmic artery.—Dr. POWELL suggested that the condition might be largely one of dilatation of the superficial vessels from some nerve derangement. It would be worth while to try the effect of continuous cold, which had proved so effectual in the case alluded to by Mr. Morris.—Mr. LUCAS had not yet tried the application of cold, nor the plan of dividing the mass in various directions by the galvanic cautery, as suggested by Mr. Holmes. Certainly the growth began with extreme pain—thought to be toothache.

The Society then adjourned till October.

MEDICAL OFFICERS OF HEALTH SOCIETY.

AT a meeting of the Society, held at 1, Adam-street, Adelphi, on May 20th, the President, Dr. Bristowe, in the chair,

Dr. B. W. RICHARDSON read a paper on "A Study of the Periods of Incubation of the Communicable Diseases," of which the following is an abstract. The author brought forward the five following points:—1. What is the precise application of the term "incubation," and to what diseases should it be applied? 2. What is the state of absolute knowledge of the periods of incubation of the more common communicable diseases? 3. In respect of differences of opinion on this subject do they depend on fault of observation, or on the circumstance that there are in the same diseases varying periods of incubation, the variations being under no as yet defined law? 4. If it be found that there are differences of periods in the same diseases, upon what do such differences depend? 5. What are the practical lessons which arise from the facts we at present possess, and to what extent may our knowledge be rendered available in the prevention and treatment of disease? On the first of these points Dr. Richardson said that, simple as the question seemed to be at first sight, it was by no means simple. We reduced the difficulty by limiting the term to those instances of disease in which, after a certain specific poisonous particle had been taken into the living body, certain indications of the action of that specific poisonous matter have been manifested—i.e., the period between the introduction of the poison and the manifestation of its action is the period of incubation. We fail, however, to be unanimous in the question, What is the accepted first sign of such manifestation? After citing several illustrations of this diversity of view, Dr. Richardson, by exclusion threw out local symptoms as insufficient proof, together with pain and fever, but accepted as the safest phenomenon indicating that the incubation is declared that sudden vibration between cold and heat which tells the break of continuous action between the nervous and the vascular systems to which we give the name of chill or rigor. The author next added the list of diseases, twenty-five in number, which present a stage of incubation. Under the second head, the range of period of incubation in the different diseases, the diseases were classified into five groups, according to the time of incubation in each case. The classification ran as follows:—(*a*) Shortest incubations, period one to four days: Malignant cholera, malignant pustule, plague, dissection wound disease, catarrh, if it be communicable. (*b*) Short incubations, period two to six days: Scarlet fever, rosalia idiopathica, diphtheria, croup, influenza, pertussis, erysipelas, glanders, yellow fever, grease, farcy, pyæmia, puerperal fever, dengue. (*c*) Medium incubations, period five to eight days: Relapsing fever, vaccinia, variola by inoculation, gonorrhœa. (*d*) Long incubations, period ten to fifteen days: Small-pox, varicella, measles, rötheln, mumps, typhus, typhoid, or enteric fever, malarial fever. (*e*) Longest incubations, period forty days or longer: Syphilis, hydrophobia, in which the range may be from seven days to months, or even years. From these general rules Dr. Richardson proceeded to state the exceptions to them in detail, the variations being most marked in class *b*, where the periods of incubation are short. Under the third head of his discourse, on the reason of differences of opinion as to the periods of incubation, the author held that such differences are traceable to four sets of causes. First, that we have not been, up to this time, agreed as to the full symptoms that indicate the stage when incubation is complete; secondly, that until lately we have not tried to classify diseases according to the test of incubation; thirdly, that we have attached too much importance to the exceptional phenomena of incubation; fourthly, that we have been too prone to connect diseases together which are in some respects similar, but which in regard to incubation are most dissimilar. Now that we are approaching nearer to the truth we may soon be able to classify and understand the exceptions from the ordinary or natural rule of incubation. After paying a warm tribute of respect to Dr. Squire for his important labours in this field of research, the author proceeded to consider the circumstances which may lead to differences in periods of inoculation in the same affections. He suggested that as it was not known that inoculation of a poisonous particle shortened the period of incubation, so it was possible that in some cases where the poison was absorbed an accidental inoculation might account for variation of time of incubation. Again, the poison might be absorbed in one case in a form of diffusion readier for absorption in some cases than in others. But the great cause of difference was traceable to individual susceptibility, together with physiological peculiarities dependent on season and the meteorological conditions which so modify the action of the organic poisonous material. The paper was brought to a close by a review of the practical lessons which spring from the study of incubation. The points here advanced may be briefly stated as follows:—If we could arrive at defi-

nite evidence on which we could all rest, that the incubation of a disease is proved by the occurrence of a certain symptom or definite class of symptoms, we could account for much that is mysterious. For example, in vaccinia can it be that, trusting entirely to the local phenomena, we sometimes have an apparently good vaccination which never has inoculated at all? If that be so, there is a reason why the occurrence of small-pox in a person who seems to have been thoroughly vaccinated should still remain susceptible to small-pox. The suggestion, though it stand alone, is all-sufficient to indicate the practical importance of proving inoculation before pronouncing it as the protection afforded by some but not all the symptoms of a communicable affection. The division of diseases of the communicable type into different classes or groups according to the stage of incubation which is presented is a practical acquirement of the most important every day value, both in curative and preventive science. Dr. Squire has not in the least degree over-estimated this part of modern knowledge. It is quite true, as he shows, that to know when to retain at home a sick person labouring under communicable disease, when to send him from home, and when to separate him from the actual or presumably unaffected, is a direction of practical skill as eminently creditable to the profession of medicine as it is useful to the public. To remove the healthy from the affected is good practice in the case of all the diseases of the first and second of the groups of the quick and short incubation series. To remove in the third series may be sound practice. To remove the fourth or long incubation class is less important and may be a practice that is quite at fault and prejudicial. Lastly, from the study of the incubation period we learn how to assign the best means of disposing of the affected during convalescence. It seems to be a true reading of natural phenomena that the diseases of short incubation have a prolonged convalescence, and remain long sources of communication, while the diseases which show a long incubation give a quicker convalescence, and a more rapid freedom from danger as a centre of communication of disease. Here there is a practical lesson that cannot well be over-estimated. Keep the cases of short incubation at home. They will infect others and be injured themselves by removal.

In the discussion which followed, the President, Dr. Squire, Dr. Tripe, Mr. Shirley Murphy, Dr. Bate, Dr. Dixon, Dr. Heron, and Dr. Dudfield took part.

Reviews and Notices of Books.

Report on the Scientific Results of the Voyage of H.M.S. "Challenger" during the Years 1873–76. Prepared under the superintendence of Sir C. WYVILLE THOMSON, F.R.S. Zoology. Vol. II. 1881.

THE second volume of the Report of the *Challenger* expedition contains an immense amount of new and valuable information in the departments of Zoology to which it is devoted. The lively interest that is taken in the scientific results of this very important expedition is sufficiently shown by the statement made by authority in *The Times* of the 16th ult., that the sale of the parts already published by Her Majesty's Stationery Office has been so extensive that the number of copies necessary to be reserved to make up even a limited edition of the work in its complete form will allow little if any margin from which persons who begin by purchasing the later volumes can rely upon being able to complete them hereafter with the earlier numbers. The moral therefore is that those who desire to obtain complete copies of this work should at once secure the volumes that have already been issued.

The present volume contains two reports. The first is a report on certain Hydroid, Alcyonarian, and Madreporian Corals, by H. N. Moseley, M.A., F.R.S.; and the second is a report on the Birds collected during the voyage, by Philip Lutley Sclater, M.A.

Mr. Moseley commences his report with a carefully drawn-up description of Milleporidæ in general, and of Millepora nodosa in particular. The hard tissue, by him christened Cœnosteum, consisting of a widely spread basis, rises in a series of projecting, short, irregular tubercles. These present pores on their surface and canals in their interior, occupied by the cœnosarc or soft part of the coral; the cœnosteum and the cœnosarc together constituting the hydrophyton. The growth of the coral commences by the formation of a thin film, which is exactly moulded to the adjacent surface. In homology with this continuous layer other parallel layers are gradually formed, and certain transverse laminæ or tabulæ which divide the cavities of the calicles into a series of chambers, shutting off the living tissue from the abandoned dead structures beneath. The pores of Millepora are occupied by two kinds of zooids. In each system of calicles the central larger one is occupied by a short and broad "gastrozooid," provided with a mouth; whilst the surrounding smaller calicles lodge longer and more slender "dactylozooids," which have no trace of mouth. The gastrozooids are short, thick cylinders, about half a millimetre in height, with a short conical hypostome, and four, five, or six tentacles arranged equidistantly in one whorl just below the extremity of the hypostome. At the summit of the hypostome is the mouth, which in the living expanded animal has a conspicuous glistening white appearance, owing apparently to the presence of large gastric cells around the aperture, which strongly reflect the light. The dactylozooids are about three times the length of the gastrozooids; they are cylindrical and tapering; they have no trace of a mouth, but bear tentacles at irregular intervals from base to summit, the number of tentacles varying from five to twenty; they seldom carry their bodies expanded straight, but usually bent in several curves, and appear to bend over towards their gastrozooid from time to time as if to convey food. When a portion of the coral has been placed living in reagents, it is found, after becoming hardened, to be bristling all over with sheaves of threads shot from the nematocyst around the mouths of the calicles. The body of the zooids, when seen in transverse section, is found to consist of an ectodermal layer of cells, beneath which is a layer of membrane and an internal mass of endodermal cells; their bodies contain muscular fibres arranged longitudinally. The canals and spaces in the calcareous cœnosteum are occupied by a network of soft tissue, which with the external layer of ectoderm constitutes the cœnosarc. Only a thin layer of about 0·5 mm., or one-fiftieth of an inch in thickness, is living. Two forms of nematocysts were observed: One which appears to be confined to Hydrozoa, and not to occur at all in Anthozoa—viz., that in which a bladder-like enlargement of the thread occurs at that part of it which is in immediate proximity to the mouth of the cell, the bladder being armed near its summit by three spines set in one whorl. The other form is large and ovoidal, with a thread beset in part of its length with recurved spines; these also occur in hydroid polypes, but are not of so characteristic a form as the three-spined kind. It is a subject for regret that no trace of generative organs could be detected in connexion with any of the zooids. Mr. Moseley, however, is perfectly satisfied that the Milleporidæ are true hydroids, as maintained by Agassiz in 1859. He is also convinced that the Stylasteridæ, the second great division of the Hydrocorallinæ, are Hydroids, and not Anthozoans, and he gives an elaborate description of the hard and soft parts of the several genera of these animals, which he divides into twelve genera, named respectively, Sporadopora, Pliobothrus, Errina, Distichopora, Labiopora, Spinipora, Allopora, Stylaster, Stenohelia, Conopora, Cryptohelia, and Astylus.

Part II. of Mr. Moseley's report is devoted to the Helioporidæ, Part III. to the Deep-sea Madreporaria. The number of these was comparatively small, but all are described, and the new forms are all shown in wood-cuts, and in the plates, which are most beautifully exe-

cuted, and do great credit to Mr. Moseley's skill in delineation.

The second section of the volume is occupied with a Report on the Birds collected during the voyage of the *Challenger* by Philip Lutley Sclater, which comprises also a report on those collected in the Philippine Islands by the Marquis of Tweeddale, and other reports on the birds collected in special regions by Dr. Fuisch, M. Salvadori, Mr. Forbes, Mr. Saunders, and Mr. Salvin. Mr. Sclater also contributes a list of the eggs collected during the expedition, and there is a short note by Mr. A. H. Garrod on the gizzard and other organs of Carpophaga latrans. Thirty coloured plates illustrate the more important new birds that have been found, some of which are most gorgeously coloured.

A Treatise on Foreign Bodies in Surgical Practice. By ALFRED POULET, M.D., Adjutant Surgeon-Major, Inspector of the School for Military Medicine at Val-de-Grâce. Two Vols. New York: W. Wood and Co. London: Sampson Low and Co. 1880.

THESE volumes are issued as a portion of "Wood's Library of Standard Medical Authors." They are the result of a very great amount of labour on Dr. Poulet's part, and are a valuable storehouse of useful and curious information on a subject from its very nature rich in remarkable details and incidents. Ancient and modern literature in many languages has been ransacked for all kinds of cases of foreign bodies, and anyone desirous of acquainting himself with the history of foreign bodies in any situation will find these volumes a necessary and very valuable help. But having said this much we are not able to speak any further words of praise. It is a wearisome book to read, and every page bears evidence of the author's painful efforts to be very complete, and very systematic, and very theoretical. All extraneous matters that can possibly be dragged in are made to swell the amount of information given; and the author appears not to be able so to group the facts bearing on his subject as to present all their points in their due proportion, and so he seems to us to fail in giving clear pictures of the different states he tries to delineate, and still more do we find wanting precise practical indications for treatment. Indeed we have the impression that the book is the outcome of wide and careful reading—what has been called paste and scissors—not backed up by extensive practical experience. In the preface one of the reasons why the book has been written is stated to be the ignorance of students and young practitioners on the subject of the treatment of foreign bodies. We will not attempt to dispute the fact now and here, but we feel sure no such student would ever think of going to Dr. Poulet's work for help in time of difficulty, for he would soon be lost in the maze of bewildering details. It must form a feature in all college and public scientific libraries, and no doubt it will be often quoted by other writers who will reap advantage from Dr. Poulet's labours.

New Inventions.

DISARTICULATING STETHOSCOPE.

THIS instrument, designed by Dr. Whittaker, is contrived chiefly for convenience in carrying. One half the stem is contained within the other half, the screw-thread keeping

Fig. 1.

it fixed. For use, the smaller tube is unscrewed and applied the reverse way to the larger, and fixed by the screw, forming a stem similar to the ordinary stem of a stethoscope. Fig. 2 represents the ear- and chest-pieces as arranged for carrying; one fits within the other. When

Fig. 2.

required for use, they are separated, and the "fitting" joints enable them to be fixed firmly and instantaneously to their respective ends of the stem, ground accurately to receive them. The chest- and ear-pieces, when arranged for carrying, take up no more room than a medal or a couple of coins, while the stem takes up the same room as an ordinary pencil; both may be carried in the waistcoat-pocket, and never noticed. The advantages will at once be obvious, since it is difficult to conceive an awkwarder instrument than the stethoscope for carrying; and if the instrument can be made to equal the ordinary stethoscope in its acoustic properties, this ingenious device is sure to meet with approval. A comparative trial with this invention shows that (possibly owing to the necessarily flat surface of the chest-piece) in the latter respect it hardly comes up to the awkward but reliable wooden stethoscope. It is made by Hilliard of Glasgow.

THE EXAMINATIONS FOR THE FELLOWSHIP OF THE ROYAL COLLEGE OF SURGEONS.

To the Editor of THE LANCET.

SIR,—I am glad to see that the results of the recent examinations at the Royal College of Surgeons of England are of sufficient importance and gravity to demand a leading article in THE LANCET.

With the examinations for the membership you deal fully, the Fellowship Examinations you merely characterise as "peculiar," and dismiss with a very short notice. As a member of the profession deeply interested in all that concerns medical education, I beg to call your further attention to the examinations for the Fellowship, about which "the schools" are just now deeply exercised, and I fear not without some reason. The feeling abroad is, that however well prepared the candidates may be, only a certain proportion are allowed to pass, and that the process of elimination is attended with so much uncertainty that men who have already distinguished themselves as demonstrators of anatomy, senior house-surgeons, &c., frequently "fail to satisfy the examiners," while men of a very inferior status as frequently manage to get through.

When it is remembered, moreover, that each rejection brings a fee of five pounds to the College exchequer, the money question is, to say the least of it, not satisfactory. I venture to think that the fee ought not to be redemanded every time an unfortunate candidate presents himself for re-examination (it is not so, I believe, at the London University examinations), and that a severe and very searching examination might be possible, with results less at variance with the judgments of those who, having known the candidates and their work for long periods, are not likely to err in their opinions regarding them.

The present uncertainties and peculiarities which lead our best men to expect one or more mishaps almost as a matter of course, and to accept a pass, if it falls to their lot, as a happy piece of luck, will not tend to raise the standard of the examination, or add to the dignity and value of the Fellowship of the Royal College of Surgeons of England.

I am, Sir, yours obediently,

June, 1881. CHIRURGUS.

*** If our correspondent will consult the last balance-sheet of the College, he will find that the two examinations for the Fellowship entailed, last year, a total loss of £217 18*s.* 4*d.*—ED. L.

THE LANCET.

LONDON: SATURDAY, JUNE 18, 1881.

IT is not easy to put aside all doubts as to the expediency of the publication of Dr. BUCHANAN'S Memorandum on the estimated relative incidence of the present epidemic of small-pox upon the vaccinated and unvaccinated in the London population, although it must be freely admitted that the statistics are dealt with in an effective, if not an entirely novel manner. Supposing that the small class which is opposed to vaccination were open to conviction through the medium of arguments based upon statistics, we might fairly expect that the publication of this Memorandum would have some effect upon this opposition. Those, however, who know best the weapons used by the leading anti-vaccinationists, and the method of their use, will find it difficult to be sanguine as to the effect of Dr. BUCHANAN'S Memorandum. To the believers in vaccination, and in the expediency of compulsory vaccination, the Memorandum will be readily accepted as a clear and logical arrangement of facts which afford the strongest evidence of the protective power of vaccination against small-pox fatality.

The Memorandum is based entirely upon the 1532 fatal cases of small-pox registered in London during the fifty-two weeks ending 28th May last, and upon the information respecting the vaccination or non-vaccination of these cases, recorded by certifying medical practitioners, and published by the Registrar-General in his Weekly Return. This information was unfortunately not given in 570, or 37 per cent., of the 1532 fatal cases; and Dr. BUCHANAN has had to base his calculations and conclusions on the 962 cases in which the information was furnished, and of necessity to assume that the proportion of vaccinated and unvaccinated among the "not stated" cases was the same as that found to prevail among the stated cases. It is this very assumption on the part of Dr. FARR and the Registrar-General which has, during the past ten years, subjected them to the virulent abuse of anti-vaccinationists. Therefore, while we fully accept as trustworthy the grounds, so well explained by Dr. BUCHANAN, for making this assumption, we fail to see the expediency of its reassertion. When we come to the second stage of Dr. BUCHANAN'S calculations, we are still upon debateable ground—namely, the estimation of the numbers of vaccinated and of unvaccinated persons in the London population. On the basis of an estimate which has been frequently used, and as frequently attacked, it is calculated that the London population contains only 190,000 unvaccinated persons. Dr. BUCHANAN further assumes that 105,000 of this number are of persons under twenty years of age, and only 11,000 of children under five years of age. Anti-vaccinationists have urged again and again that the estimates of the numbers of the unvaccinated are far too low, and we cannot feel sanguine as to their acceptance of them now. However, when Dr. BUCHANAN shows that during the past year the death-rate per million from small-pox in London has been only 90 among the vaccinated, against 3350 among the unvaccinated, it is impossible to deny that the figures, after full allowance for possible errors of estimate, afford overwhelming testimony in favour of vaccination. Similar statistics, based upon similar calculations, show that under five years of age the proportional mortality from small-pox in the past year was 40½ per million among the vaccinated and 5950 among the unvaccinated class. These figures, however, understate the true relative proportion of mortality from small-pox among these two classes of the population, as among infants under one year of age in epidemic seasons many are vaccinated while under the influence of infection, and if fatal small-pox afterwards occur the cases are improperly described as vaccinated. It would have been better to have left the infant population out of the calculation, and to have dealt with children aged one year and under five. It is not surprising to find that the protective power of vaccination, tested by Dr. BUCHANAN'S figures, decreases at more advanced ages. However, among all persons aged under twenty years, the relative mortality is shown to be 61 and 4520 per million of the vaccinated and unvaccinated classes respectively. Considering that one of the important features of recent small-pox epidemics is the large and increasing proportion of adults, we regret that Dr. BUCHANAN has not dealt in his Memorandum with the relative mortality during last year among persons aged upwards of twenty years. There is undoubted difficulty in the way of estimating the numbers of vaccinated and unvaccinated adults in the population; from Dr. BUCHANAN'S figures, however, he appears to estimate that there are only 85,000 unvaccinated adults in London. We rather doubt the probability of there being in London fewer unvaccinated adults than unvaccinated persons under twenty years of age; but accepting these figures, it follows that during last year the proportional rate of mortality among adults was respectively 111 and 1906 per million living of each class.

These facts, after full allowance for all errors in the estimates used for the calculations, afford grounds for the strongest special pleading in favour of vaccination. We doubt, however, the expediency of any such special pleading. *It is beyond dispute that efficient infant vaccination, followed by efficient revaccination at adolescence, practically confer immunity from fatal small-pox.* It is wiser, we think, for the Department having the control of vaccination simply to take its stand upon this ground, and to accept the recent small-pox epidemic in London, so far as regards the deaths of children, as evidence of a failure of the vaccination system as at present carried out. Vaccination requires no defence or apology at the hands of its administrators, and this Memorandum suggests an admission that the President of the Local Government Board considered vaccination itself to be on its trial, instead of the system and efficiency of vaccination administration.

From our point of view the most satisfactory part of Dr. BUCHANAN'S Memorandum is that in which he says, "I am now engaged, with Dr. STEVENS' assistance, in some inquiries into the relative protective influence of one and another sort of vaccination." With regard to the ninety-four registered cases of fatal small-pox after vaccination in London during the past year, under

twenty years of age, it is of the first importance to have some information. Were those ninety-four young persons ever really vaccinated, and if so were the vaccinations performed by public or private vaccinators? It is no secret that much of the so-called vaccination in London and elsewhere, although certified as successful, is really of none effect. It is this which tends to discredit vaccination, and it is this which calls for searching investigation and exposure. According to the most recent official returns little more than six per cent. of the children in Bethnal-green escape successful vaccination; and yet it appears from a report based upon a house-to-house visitation made by the vaccination officer of that parish during the past three weeks, that out of a total of 6018 children under fourteen years of age, respecting whom inquiries had been made, no less than *828, or 13·8 per cent.*, were *unvaccinated*. Such a failure of our vaccination system calls for explanation, and at the same time throws considerable light upon the cause of the recent fatal prevalence of small-pox in East London, especially in Bethnal-green and Shoreditch.

We have fortunately now arrived at the season when the small-pox epidemic in London will inevitably subside; indeed the decline has already set in. Before the season for its revival comes round it is not unreasonable to hope that we may know more of the causes of the comparative failure of the vaccination system in London, in order that measures may be taken for increasing its efficiency.

To the credit of our common philanthropy, Hospital Sunday is as much an institution now in London as hospitals themselves are. Towards the close of 1872 it was proposed that collections for the benefit of hospitals and dispensaries in London should be annually made on one Sunday in the year at all places of worship. THE LANCET was the original promoter of the movement, and has supported it with signal success. The prosperity of the enterprise has varied since then with the varying prosperity of the country, but there is good reason to believe that the institution itself, and the Council by which it is carried on, enjoy increasingly, year by year, the confidence of the churches. In 1880 the largest sum yet raised for the purpose was collected. Last year we were careful to go into some detail to stimulate sympathy with sickness; and we have the pleasure to remember that our statements were extensively read, and that the resulting collection was the largest in any year since the foundation of Hospital Sunday. We will not repeat our arguments for a good collection on Sunday next. There is no doubt that it will be most acceptable to both the hospitals and dispensaries. Depression of trade, or something else, still continues to affect hospital finances so as to make the administration of hospitals and dispensaries anxious work. It is within our knowledge that many of them are only kept going by selling out scanty stock, that gives little sense of security and comfort to those who are responsible. Nearly every hospital report that we take up has some such burden to disclose. There are signs of revival of trade according to the admission of critics. It is certain that there is trade enough to supply funds to enable the committees to fill every bed in every London hospital, and pay off the debt of every London hospital and dispensary. With a little more charity and consideration of the case of the inmates of our hospitals, the last collection might be easily exceeded by £10,000. We suggested last year that ministers should visit the hospitals on the Saturday preceding the day of collection. We are sure of two things: first, that they would be well received; and, secondly, that, in the sight of so much sickness and of the many "lenient arts" by which it is sought to mitigate it, they would find the truest inspiration for an appeal to Christian charity. The hospitals were never more worthy of benevolent help than they are to-day. They never did more good or less harm. They never were administered more wisely or economically, or with better precautions against abuse. It is not the least claim of Hospital Sunday that it has brought the hospitals and the churches, irrespective of creed, into close contact, and made hospital relief and help much more accessible to really deserving cases.

SINCE VIERORDT first introduced the method of counting the corpuscles in a given volume of blood as a source of information regarding its pathological states, several observers have applied the method to the investigation of the effect of loss of blood on that which remains in the circulation. The latest, and one of the most valuable, of these investigations has been carried out at Heidelberg by an American physician, Dr. LYON.

Before trustworthy conclusions could be drawn from the results of experiments in producing traumatic anæmia, it was necessary to ascertain the spontaneous variations in the corpuscular richness of the blood. Observations for seven days on a dog, and for twenty-one days on himself, led Dr. LYON to the conclusion that the variations in a single day are so slight that they may be disregarded, but that during a series of days variations do occur which cannot be accredited to errors of observation. In the dog there was a steady slight decrease, amounting to about 6 per cent.; in the experimenter there was a gradual increase in the number of corpuscles per cubic millimetre, amounting to about 2 per cent. It is of great importance that the occurrence of such variations should not be lost sight of in drawing inferences from observations in pathological conditions. The observations on the effect of hæmorrhage were made upon dogs which were fed once daily, and the corpuscles were counted just before the daily feeding. At least 5000 red and 200 white were counted on each numeration. Previous experiments had shown that the error in observation, if 5000 corpuscles are counted, does not amount to more than 1 per cent., and if 200 are counted it amounts to about 5 per cent., but in taking the blood from the ear of an animal it was probable that the amount of error would be nearly twice this. The hæmorrhage was effected in most cases by opening the jugular or some other large vein, the animals being at the time under the influence of morphia. The amount of blood taken varied from 700 to 1350 cubic centimetres, being from 3·5 to 4·5 per cent. of the body weight. Observations made during and directly after the hæmorrhage showed an immediate diminution in the corpuscular richness of the blood, which agrees with the result obtained by other observers. The fall is, however, far greater in the case of guinea-pigs than in dogs. In the latter, even a very large hæmorrhage (equal to 4 per cent. of the body weight) does not reduce the number of corpuscles below 80 per cent. of the normal, while in the former a loss of blood amounting to only

2 per cent. of the body weight has reduced the number almost to one-half of the normal. A possible explanation of this may be found in some observations of VON LESSER, who found that the variations in the amount of hæmoglobin in the blood, after slight and considerable hæmorrhages, corresponded closely to the variations in the blood-pressure. The greater the fall in the blood-pressure, the greater is the diminution in the amount of hæmoglobin. It seems necessary to assume that in the guinea-pigs there is a greater fall in blood-pressure than in dogs, and a correspondingly greater quantity of serum passes into the blood from the tissues.

The observations corroborate the statements of HUNERFAUTH and BUNTZEN that the proportion of corpuscles in the blood falls still further during the first days after the loss of blood, and only regains the normal at a later period. The time at which the minimum is reached varies from a few hours to several days. It is roughly proportioned to the amount of blood lost, the interval being the longer the greater is the loss; but this relation, although generally to be observed, is not exact. The normal—i.e., the amount of corpuscles before the hæmorrhage—is usually regained in rather less than three weeks after the operation.

A very different effect is, however, manifested by the white corpuscles. In a few hours, and for a few days after the hæmorrhage, their number per cubic millimetre of blood is found to exceed considerably the number previous to the operation. The maximum is usually attained within a few hours, rarely not until the next day. It may amount at the maximum to two, four, or even five times the normal average. The duration of the excess is about four days, and then it gradually passes away. This change of the two kinds of corpuscles in different directions explains the great alteration in their relative proportion which has been known, since the time of REMAK, to follow loss of blood.

The attempt to ascertain the facts in the case of man is beset with many difficulties. Alike in the case of injuries and operations, it is difficult or impossible to ascertain exactly the amount of blood lost, and it is equally difficult to ascertain the normal state of the blood in the individual for purposes of comparison. Some interesting facts observed with great care by Dr. LYON show clearly, however, that the same effect occurs in man as in the dog. The white corpuscles are immediately increased in number, and this increase lasts for several days. The diminution in the number of red corpuscles also lasts for several days, and the minimum occurs sooner the slighter the hæmorrhage. In one case, in which great loss of blood occurred, on an attempt to remove a fibroma from the posterior nares, the pulse could scarcely be felt, and artificial respiration was needed; the minimum amounted to a reduction of one-half the corpuscular richness of the blood before the operation, and this was reached, as in the case of animals, on the fourth day. The length of time needed for the return of the blood to the normal varies greatly in different cases, being, in some, increased by secondary hæmorrhage, as in the case just mentioned. In others the increase in corpuscles was apparently accelerated by the occurrence of diarrhœa, which, as BROUARDEL has shown, renders the number of corpuscles, in a given volume of the blood, greater, no doubt, by withdrawing some of the serum. In some cases the fall which was observed was actually greater than the amount of blood taken would account for, and for these cases the explanation is offered that the phenomenon is really the result of the effect of the small hæmorrhage on the blood-pressure.

PROFESSOR STRUTHERS is as much entitled to be heard as most men on the feeling in favour of having some kind of Joint Examination Board. His letter of last week will be read with interest by a large number of persons, in and out of the profession, who are studying the present state of the law of Medical Registration, and watching the action of the Royal Commission charged to investigate the working of that and other parts of the Medical Act of 1858. There is something captivating in the very simplicity of the problem of Medical Reform, as it is presented in Professor STRUTHERS' letter. The feeling in favour of it is located in England; it has its "just" root in the state of the law which permits registration on a partial qualification, and in the desire to see the Colleges of Physicians and Surgeons form a joint examination. Were such a junction formed voluntarily and a Registration Act passed requiring "a complete qualification before registration, the licensing difficulty would be virtually at an end." The Corporations are all anxious to form such boards, and to discontinue their separate action in granting diplomas, but mutual distrust hinders. Edinburgh has set the good example of a joint examination, but there is still the weak point of separate action and a one-sided diploma, and she fears to discontinue this lest London should not follow suit. And as Edinburgh distrusts London, London distrusts Edinburgh, and each goes on its own way.

There is some truth in this mode of putting the question; but it has one fatal defect—it is a thoroughly inadequate statement of a large and complicated evil. It has been a favourite representation of our Scotch friends that all that was wanted was to stop single qualifications being granted, and to make only complete or double qualifications registrable. But a very little consideration will convince our readers, and, we would fain hope, convince Dr. STRUTHERS, that his simple remedy bears no proportion to the evil to be remedied. The real evil is not now so much in the existence of one-sided examinations, for under the influence of public opinion examinations have become far less one-sided than they used to be, and embrace, as a rule, all branches of general practice. It is in the inequality of the examinations. The Corporations themselves disparage each other. We shall not decide which Corporation has the better right to be satisfied with its own examination, and to disparage that of the sister college in the other division of the kingdom. But there is inequality. Men rejected at one Board over and over again go confidently to another, and come back with a title to registration which had been denied them at the first institution to which they applied. We shall not attempt to prove that this inequality exists; it is notorious. If this is true of the lowest qualifications, it is still more true of the highest ones. So that whereas a Fellowship of one college must be gained by long study and the severest examinations, that of another may be had practically for money. Then, again, not only are the examinations for corresponding qualifications unequal, but the diploma-granting bodies are, on all hands, allowed to be too numerous. When diplomas had only a local value numerous and local attesting

bodies might be required. But now, when a diploma granted in one division of the kingdom qualifies in all, and in all parts of the empire, imperial precautions to secure equality should be taken. They are not even hinted at in Dr. STRUTHERS' letter. The very number of the bodies claiming to enter into conjoint schemes makes such schemes dear and difficult to work, and we shall be grievously disappointed if the Royal Commission does not see this. We are not concerned to deny the honourable spirit which actuates the leaders of the Corporations. Corporations are all "honourable," but there are too many of them, and their mutual competition has not always been honourable to the profession or advantageous to the public. Professor STRUTHERS' representation is surely inadequate in another point. It locates the dissatisfaction with the existing system "in England." We believe it to be far more general. It certainly obtains largely in Ireland and, we believe, in Scotland too. Scotland can well afford to favour a thorough reform. In her universities she educates English practitioners on a large scale, and she is indeed deeply interested in every improvement of the tests by which medical education is proved. Her University system and interests are well represented on the Royal Commission by Professor TURNER; but we shall be surprised if he fails to recognise that the interest of Scotland—of her universities at least, if not of her Corporations—is to say, as Professor GAIRDNER virtually said before the Select Committee, "give us legislation that will satisfy a General Medical Council that our education is good and that our examinations are efficient." Professor STRUTHERS seems to think the institution of voluntary Conjoint Boards by the Colleges of Surgeons and Physicians will leave nothing to be done by the Royal Commission. We differ from him. It is too late now to arrest an investigation into arrangements which are costly, complicated, inefficient, and altogether out of time.

THE subject of lunacy law reform would seem to have been again shelved by the second reading of Mr. DILLWYN'S Bill. This is to be regretted, although, perhaps, the result was inevitable. If the Government had rejected the measure the agitation would have been increased rather than appeased by the opposition offered. What has happened is a hollow compromise, a concession sulkily made to the effect that the Bill should be read a second time on the understanding that the Government would not be further troubled in the matter. A hope prevails among distinguished personages and in official circles, from the Lord Chancellor, the Home Secretary, the Commissioners in Lunacy, the proprietors of private asylums, down to the classes or individuals supposed to be interested in perpetuating the existing state of matters, that now the member for Swansea has had his say the question will rest and its promoters be silenced. It is not worth while to discuss the probabilities that this hope may be realised. Its fruition would not surprise us. There is no more successful mode of dealing with a question of this character than that adopted. Mr. COURTNEY was put up to champion the worn-out policy of resistance, and very awkwardly did that gentleman acquit himself of the task. The Home Secretary broached the alternative method of getting rid of the question, albeit, with less than his usual grace and sagacity, and the measure fell to the ground; and that was the end which, so far as the Government was concerned, it was desired to compass.

Mr. DILLWYN is probably satisfied with the result he has obtained. He has embodied in the re-amended draft of his Bill, the one now formally before the House of Commons, some half-dozen of the proposals which have from time to time been made in these columns: for example, the purchase of private asylums by the creation of State bonds, the requirement of an *official* medical signature to every certificate, the creation of a local inspectorship, with a system of printed reports to be made directly to the Commissioners in Lunacy, the establishment of a practical supervision of cases by an official who will know the patients personally, and a provision by which the insane can be promptly placed under treatment without the delay and excitement caused by formal certifying, an examination being made by an independent officer *after* the patient has been removed to an asylum. In so far as the Bill which has now been read a second time embodies these reforms, we, of course, approve it, though we shall hereafter—if it should be revived—have something to say as to the manner in which the proposals adopted agree or disagree with other parts of the Bill. Before the introduction of the provisions taken from the columns of THE LANCET, we were only able to give the measure a very guarded support. Our feeling towards it is still only so far favourable as it may be susceptible of modification to meet our views. The subject of lunacy law reform is one which we have urged on the consideration of the Legislature and the profession continually for many years past; and we shall never grow weary of pressing it until private asylums are placed on an entirely new footing, being in fact, if not in name, converted into public institutions, their proprietors no longer deriving direct benefit from the retention of patients, and their executive staff being armed with public and official, instead of private and personal, authority over their inmates, and until measures are taken to prevent the sane but excitable from being hurried into asylums, and to secure that the convalescent may find an easy way of escape. In short, we cannot, so far as our appeal is concerned, allow the matter to drop until a large and liberal measure of reform has been passed—whether by some enlightened Government or an enterprising member we care not, so that the law be amended as justice and public safety demand.

We discussed the principal clauses of Mr. DILLWYN'S Bill at some length on the 5th of February last, and there is nothing further to say on the subject at the present moment. The comments which have appeared in the press on the measure, and the brief discussion which was raised on the second reading, point almost unanimously to the conclusion that the member for Swansea would have done better to adopt our proposals in their entirety than in part only. The *Saturday Review* and other thoughtful contemporaries have indicated the defects of the Bill as it stands, and these are, with scarcely an exception, due to the omission of some integral part of our proposal. For example, the *Saturday Review* says:—

"What is really needed—so long as private asylums are allowed to exist—is that every alleged lunatic confined in them shall be personally examined, at reasonably short intervals, by a competent Medical Inspector, who shall in

each case make an order, either for the discharge or for the continued confinement of the patient, according to the opinion he has formed of his mental state at the time. This Medical Inspector should be an officer of the Government, and so be above any possibility of being influenced either by the proprietor of the asylum or by the friends of the patient."

This is but a paraphrase of the following specific suggestion for dealing with the cases of patients on removal to an asylum. "Within eighteen hours of admission, notice should be sent to the office of the Commissioners in Lunacy, and an order be issued from the Board to an *official* medical examiner, duly appointed by the Board, and not engaged in private practice, either as medical attendant or medical witness, who should at once proceed to the asylum, and report *directly to the Commissioners* as to the nature of the case, and the expediency of detaining it. If residence in the asylum were deemed desirable, the Commissioners could make an order to that effect—such order to have the force of a certificate of insanity—and by the visits of these inspectors provide for *the continuous watching of the case.* In this way, for twelve months at least, every new patient would be *kept under official observation*, a measure which could scarcely fail to exert a satisfactory influence on the treatment." The parallelism of thought, if not the origin of the suggestion, is obvious. In short, the Bill is weak where our proposals were discarded, and strong only where they have been adopted. We shall look with interest to the form in which this measure may survive, or be introduced at another opportunity. If its author is well-advised he will embody the scheme we have laid before the public without modification or abatement.

THE International Congress dates from a meeting of the French Medical Association in Bordeaux in 1865. The idea there ventilated was first realised in Paris in 1867, under the presidency of M. BOUILLAUD, during the time of the International Exhibition. The next meeting was held in Florence in 1869, and subsequently the Congress assembled in Vienna (1873), in Brussels (1875), in Geneva (1877), and in Amsterdam (1879). An International Medical Congress held in Philadelphia at the time of the Great Exhibition there, was not one of this series. At each of the meetings in the continental capitals large numbers of delegates and members attended. But the meeting shortly to be held in London is looked forward to by those most interested in the Congress as marking a new era in its history, and as a venture of a far bolder character. Hitherto the business has been transacted in one or, at most, two languages. In the London meeting three languages will be spoken, and while before only the attendants at one meeting had invitations addressed to them for the next, the London Executive have issued an invitation in his own language to nearly every medical man in the world. An effort has thus been made to ensure its being in fact, and not in name only, an International Congress. It is a matter of just pride to us that such a change in the scope of the Congress should be connected with its meeting in London, which we call the metropolis of the world. And, although we have not the right to assume superiority in matters medical and scientific, we have yet such a history, with its records of HUNTER, HARVEY, JENNER, and the BELLS, and in more recent times of COOPER, LISTON, SYME, SIMPSON, BRIGHT, ADDISON, GRAVES, STOKES, and FERGUSSON, not to mention many others, that, whether on the ground of great historic discoveries, or on that of successful practice of our art, we can bear comparison with any country, and with no lack of propriety ask the medical profession of the world to meet us in scientific discussion. In America and all the countries of Europe great interest has been awakened in the ensuing meeting, and very high expectations are being held of its importance and usefulness. Thus early more than 300 foreigners have intimated their intention of attending, including men of world-wide reputation, such as ALBANESE, ALBERTIS, ANGELUCCI, BILLINGS, BROWN, BARDELEBEN, BIGELOW, CHARCOT, CHAUVEAU, DONDERS, ESMARCH, HALLÉ, HARDY, HEBRA, KÜSTER, LANGENBECK, SNELLEN, VERNEUIL, and VOLKMANN. Several foreign Governments and learned Societies have expressed their desire to send representatives to report on the meeting. The medical profession in England has already to a large extent shown its interest by monetary subscriptions and by the labours of the secretaries and executive officials of the various sections and committees. But it rests with the whole constituency to make the Congress such a thorough success as it ought to be. And every one must feel, apart from other perhaps more worthy motives, that national pride and generous hospitality alike compel us each to do his utmost to make not only the visit of our foreign friends pleasant, but the meeting of so many leaders in medical science useful to the world at large. Intelligent interest and sympathy will greatly aid the executive, and will enable them to carry to a successful issue schemes which otherwise must prove futile. We have no doubt that this support will be forthcoming. Some, however, may ask, What possible good can come out of the Congress?—whether it will not be a very busy week, with crowded meetings at which the business will be hurried over, followed by pleasant entertainments in the evening; in fact, an excuse for a holiday with a semblance of work? No doubt some Congresses are such and but little else. But surely more is to be hoped for from our August gathering. To meet face to face those who are now but celebrated names to many of us, and to form friendships with fellow-workers in other lands, will not only add a zest to our own work, but will greatly enlarge our interest in that of others. With the rapid strides science and the medical art are making in almost all countries, it becomes impossible for practitioners, especially those who are themselves the most active, to keep *au courant* with all the details of the general advance, and it is a labour of a life to acquire thoroughly the knowledge that has been and still is being accumulated on even the subdivisions that are now universally made. But when the leading workers from all lands meet together, knowledge is very rapidly imparted and interchanged; views that perhaps would never otherwise reach us are expressed, and opinions well cherished and supported may quickly receive their quietus. It must be evident to all that no one really desirous of learning may not in the one short week gain large stores of information from those best qualified to give it—first hand, not filtered through text-books and reviews. Among the large number of papers that

will be read we may certainly count upon many of permanent value; and the more formal addresses to be delivered by Sir JAMES PAGET, MAURICE RAYNAUD, Dr. BILLINGS, Professor VOLKMANN, and Professor HUXLEY, are each and all of them sure to be worthy of the great occasions on which they will be delivered, and lasting memorials to the scientific fame of the orators. It has been well said that a visitor to Rome sees in that unrivalled city only what he is already acquainted with; so those who look upon Congresses as holidays will find this particular one a holiday of unequalled interest, while those who come to it desiring to learn will have an unexampled opportunity of doing so. Indeed it is too obvious to require any argument that a meeting of several hundreds of medical men, to a large extent unacquainted with each other's opinions and practice, must be productive of most valuable results.

Annotations.

"Ne quid nimis."

COLLEGE ELECTIONS.

THE time for nominating candidates for seats in the Council of the Royal College of Surgeons at the annual meeting to be held on Thursday, the 7th prox., expired on Monday last, the 13th inst. The following gentlemen have been nominated:—Sir James Paget and Mr. Walton for re-election; and the following for election in the order of seniority: Mr. John Whitaker Hulke, May 23rd, 1857; Mr. John Croft, Nov. 24th, 1859; Mr. Christopher Heath, May 31st, 1860; Mr. Reginald Harrison, Dec. 13th, 1866. The new candidates are all Fellows of the College by examination. Mr. Hulke is also a Fellow of the Royal Society, surgeon to the Middlesex Hospital, and obtained the Jacksonian prize, in the year 1859, for his essay on the morbid changes of the retina, as seen in the eye of the living person, and after removal from the body, together with the symptoms associated with the several morbid conditions; he is, besides, a member of the Court of Examiners. Mr. John Croft is surgeon to, and lecturer on surgery at, St. Thomas's Hospital, and late examiner in surgery at the Royal College of Physicians. Mr. Christopher Heath is surgeon to University College Hospital, Holme professor of clinical surgery in University College, late chairman of the Board of Examiners of the College of Surgeons, and, like Mr. Hulke, a Jacksonian prizeman for an essay on injuries and diseases of the jaws, including those of the antrum, with the treatment by operation or otherwise. Mr. Reginald Harrison is surgeon to the Liverpool Royal Infirmary. Mr. Sydney Jones is not a candidate, as we incorrectly stated last week. There are, therefore, seven candidates for the three vacant seats. No doubt can be entertained about the re-election of Sir James Paget, who has served the College well for many years. For the two other seats there will be the keenest competition. It is commonly felt that two, at least, of the candidates, are of conspicuous merit, and possess exceptional claims upon the suffrages of the Fellows. Both Mr. Hulke and Mr. Heath have rendered long and important services to the College as examiners, and they have both had extended experience as teachers in large metropolitan schools. It is satisfactory to find that not one of the candidates this year possesses an overwhelming reputation as an exponent or practitioner of a particular department of surgery. A story is current—it must refer to a long past epoch—of a gentleman, who had been elected a member of the Council solely on his reputation as a champion of special pathological doctrines, but took so little interest in the affairs of the College and attended so few meetings of the Council, that he was unable at the end of his first year to give the names of the president and vice-presidents of the College. Such candidates are out of date now. The affairs of the College are of growing importance, and need the close and unremitting attention of all the members of its Council, whose chief qualifications should be personal experience of all matters relating to medical education, and capacity and inclination to deal fairly and honestly with all questions of medical reform. It may be added that this year red pencils will be used instead of *pen and ink* to mark the voting papers on the day of election.

PROFESSOR SKODA.

WITH the lamented death, on the 13th inst., of Joseph Skoda, after a prolonged and painful illness, the last of the great men whose names made Vienna famous a generation ago, has passed away. Oppolzer, Rokitansky, Hebra, and now Skoda, have departed—men who, devoting their lives to scientific medicine, may be said to have created a school which had hardly its equal at the time. Doubtless the University of Vienna will continue to hold high rank in medical education and research, but it can never be higher than it was when strangers flocked from all parts to sit at the feet of that famous band of masters. The records of the lives of such teachers are not usually eventful; they are to be found in the memories of those who have learned of them and loved them. Skoda was no exception to this. Born at Pilson, in Bohemia, on Dec. 10th, 1805, he began to study medicine at Vienna when twenty years old. He received the doctor's degree in 1831, and returned to Bohemia to practise. He was destined, however, for a wider sphere, and after doing good work in his native country during a cholera epidemic, he returned to Vienna in 1833, and was appointed second physician to the Allgemeine Krankenhaus. About fifteen years before Laennec had introduced auscultation to the medical world attention was being ardently fixed upon this method, and exaggerated ideas were formed of its scope. The kindred subject of percussion as applied to the physical diagnosis of thoracic disease had, more than a century before (viz., in 1716), been discovered by Auenbrugger in Vienna itself, but had received little attention until it was taken up by Corvisart in 1808. To the study of these subjects, in which he had been instructed by Heine and Gutbrod, young Skoda devoted himself with ardour, and in 1839 published the first edition of his famous "Abhandlung über Percussion und Auskultation"—a work which was well received on all sides, passed through many editions (the last edition, the sixth, was published in 1864), and was translated (fourth edition) into our language by Dr. Markham in 1853. In this work—considering the circumstances under which it was written, when many unwarrantable and extravagant doctrines as to the interpretation to be placed upon physical signs were in vogue, and when explanations more or less fanciful were being given to account for auscultatory phenomena—Skoda showed the first qualities of a scientific mind. He was not sparing in his criticism of some of Laennec's assumptions, and showed the utter fallacy of Piorry's pretensions; but he gave his reasons where he dissented, and endeavoured to explain all the phenomena upon the known laws of sound. The influence of Skoda's teaching has been very wide; and he would have been the first to resent any imputation of disloyalty to Laennec, for he served by his own expositions to enhance the fame of the discoverer of auscultation. In the present day these teachings, having undergone many modifications, form the essential foundation of our knowledge; and, as a testimony that in the land of Laennec the merits of the Vienna physician were well recognised, we

have the "bruit skodique," familiar to all auscultators in the subtympanitic note elicited on percussion over the compressed lung; and here we use the term "skodic resonance" with equal significance. In his preface to the translation of the work Dr. Markham says: "I would almost venture to assert that it is the most valuable treatise on auscultation which has appeared since the time of Laennec; it contains a philosophic investigation of many of the leading facts connected with the study of auscultation and percussion, and is something more than a mere manual. The reader feels that he is in the hands of a deep and original thinker, and of a most cautious and a clear-seeing observer—of one, indeed, who has had vast experience, and who manifests the rare quality of a will and a power to subject theory to the results of practice and experiment." This is not the place to show how many of Skoda's doctrines have stood the test of time. Some of them have been abandoned or modified—e.g., his theory of "consonance," and his view that both sounds of the heart were produced in the ventricles, aorta, and pulmonary artery severally (a view which Stokes also held); also his denial that muscular contraction could produce a sound. It is enough to testify that his teaching gave an impulse to the study of physical diagnosis, which continues to be felt even to this day. In 1835 Skoda commenced his courses of practical instruction in the subject he had chosen for his life-study, and in 1840 was appointed physician to the division of Chest Diseases in the great Vienna Hospital, becoming in the following year (1841) physician in chief. In 1846 he was appointed Professor of Clinical Medicine, which he held to old age, resigning the office eight years ago; and in the performance of the duties of the office he enhanced a reputation already high, and added in no small degree to the fame of the Vienna school. Contributions on clinical and pathological subjects appeared from time to time in medical journals, but he does not seem to have written much—no larger work, indeed, than the treatise above-mentioned appearing from his pen. He preferred to trust to the influence of his practical example spread over many generations of students rather than to the medium of literature as the means of obtaining fame; and he has died in the knowledge that his memory will be treasured by numberless personal pupils. About six years ago, on the occasion of attaining his seventieth year—when even then his strength was failing—he received the congratulations of delegates from all the learned bodies in Vienna. A medal was "struck to commemorate the event; and seldom have professors and students been so unanimous in paying respect to the man who, many years ago, commenced by his work and lectures to impress the world with his complete familiarity with all matters regarding internal disease, especially complaints of the chest." (THE LANCET, Jan. 1st, 1876.) The final years of his life were spent in lingering pain; and in closing this imperfect notice it may be well to repeat the eloquent words of Dr. West, when speaking of the death of Rokitansky, in his presidential address to the Royal Medical and Chirurgical Society in 1879. He said, "At the grave there befel an incident of most touching pathos. The dying Skoda had himself lifted from his bed of anguish and brought in his carriage to the graveyard, where he sat watching the last of the friend whom he had loved all life long. And as he watched he envied him the great rest which that friend had found, while bodily suffering wrung from him the cry, 'I cannot die, and yet is my pain no less than his.' Skoda still lives and still suffers. We can form for him, whose services, in a different department of our art, were scarcely less eminent than Rokitansky's, no better wish than this, that the lesson which pain was meant to teach was well learnt; he too may enter into rest." At last the time has come; he has been released from his long suffering, and with his death the last link between the present and the past of the Vienna school has been severed.

NAVAL MEDICAL DEPARTMENT.

AFTER a lapse of nearly two months the Admiralty Instructions on the Order in Council reorganising the Medical Department of the Navy have been issued. For the most part they consist of a mere republication of the Orders of April 1st, which we noticed fully when promulgated (THE LANCET, April 16th, 1881). On a few points only they differ; and the first we notice is, that when a surgeon's promotion to the rank of staff-surgeon has been retarded by his failing to pass the qualifying examination, he is to be granted, when he does pass it, the seniority he would have enjoyed had he been successful in the first instance; but he is to reckon service for increase of pay and half-pay only from the date of passing. It is stated, however, that when the delay in passing has been due to unavoidable circumstances "special consideration will be given." Again, it is provided that increased rates of pay dependent on length of service are not to be paid until receipt of the requisite authority from the Accountant-General of the Navy. This, we presume, is necessary to admit of the claim for increase being verified, and cannot be a subject of complaint unless undue delay occurs in the transmission of the requisite authority. It is stated that applications from officers not entitled to retire or withdraw, to resign their commissions, will receive every consideration. Some assurance of this nature was necessary, as we have heard of medical officers being refused this permission within the last few years, thus establishing a species of compulsory service. Retired officers are promised "special consideration, as regards appointments on shore, connected with the Admiralty, now filled by civilians." Although Mr. Trevelyan stated in the House that it had been determined to frame the new regulations for the navy on the principles laid down in the report of the committee on which the recent changes in the Army Medical Service had been based, he has omitted to follow the important precedent, established by Lord Cranbrook, of granting compensation to those senior officers who are placed on half-pay at fifty-five instead of sixty years of age. A careful consideration of the provisions of the Warrant, as modified by these instructions, has failed to change the opinion we expressed when it was promulgated, that it will scarcely prove successful in inducing well qualified candidates to come forward in sufficient numbers to fill up vacancies. We do not expect that the teachers in the medical schools will consider the conditions of the Warrant so satisfactory as to induce them to recommend their students to join the Naval Service, nor that the students will be disposed to do so when the Army and Indian Medical Services are so much more attractive. The removal of the medical school for naval surgeons from Netley is a very serious drawback; the retention of the examination prior to promotion, which has been abolished in the army, will prove most unpopular; and the absence of any assurance that the rules regarding choice of cabins will in future be carried out cannot fail to keep up the feeling of uncertainty and consequent dissatisfaction which has been long prevalent in the service on that subject.

ORANGE-COLOURED PUS.

THE common variations in the colour of pus are readily and in all probability quite correctly explained by admixture with various secretions, such as the bile, coloured elements of the inflamed tissues themselves, as the pigment of the bronchial glands, or with minute or larger quantities of the colouring matter of the blood. But there are certain other cases of which this is hardly a sufficient explanation, such as those of blue suppuration (to which Dr. Gibb drew special attention some years ago, and which he attributed to the presence of cyanide of iron) and of orange-coloured pus. Surgeons who practise Listerism will be quite familiar with a bright

yellow colouration of the saturated carbolic gauze; we do not, however, refer to that, but to a condition in which, without any special external application, orange-coloured pus is *secreted*. The cases are by no means common, and the peculiar colour is usually of only short duration. M. Verneuil, in referring to his experience of them, states in the *Archiv. Gén.* that they were unusually common in the Paris hospitals during the Commune in 1871, when the wards were filled with the intemperate and half-starved victims of that insurrection. And this fact leads him to regard the condition as epidemic. It appears to M. Verneuil to depend upon the condition of the wound, and the constitutional state of the patient. Thus, it did not occur in clean, healthy wounds, but nearly always in contused wounds, with adherent sloughs. The constitutional conditions with which it was associated in his cases were diabetes mellitus, phosphaturia, alcoholism, and morphinism. As a rule it was temporary, but was continuous in some very bad cases. He regards it as a sign of danger, but has s[illegible]o reason to hold that it is usually associated with pyæmia, invariably fatal, as Delore taught. The question naturally suggests itself whether the specific cause of this suppuration be not a peculiar fungus or "germ." M. Verneuil has no direct evidence to give on this head, and the late M. Broca failed in some cultivation-experiments undertaken to throw light on this point.

EMIGRANT SHIPS.

COMPLAINTS have recently been made as to the treatment experienced by emigrants on board many of the vessels engaged in the transatlantic trade. Several of the leading English companies have written to clear themselves of the charges of neglect, overcrowding, and inadequate supply of provisions, which have been, we think, somewhat recklessly brought against them. It is well known that, so far as emigration from English ports is concerned, strict Government supervision is exercised, and we believe that on the whole the business is well conducted and the emigrants are fairly and even liberally treated. But this may not be the case with ships sailing from foreign ports. Thus we find that, whilst the English liners sailing from Liverpool do not charge less than £6 per steerage passenger, there are continental lines which advertise to supply a berth of the same class for less than that amount, although the passage to New York from a continental port must take at least two days longer than from Liverpool. It is probable that the cheaper fare tempts many to take their passage in the vessels of these foreign companies, whilst there is reason to fear that many pay their money to agents in London under the idea that the vessels they are about to sail in are under the supervision of our Government, whereas they are shipped across to some continental port to be embarked in the vessel of some foreign company. This supposition is borne out by a letter addressed to the *Bristol Mercury* of the 10th inst., by an emigrant whose experience, as described by himself, was as follows. In common with a number of other Englishmen, he was attracted by an advertisement offering a cheap passage across the Atlantic by a vessel starting from London, as was supposed, but afterwards found had Antwerp as the port of departure. The accommodation at Antwerp pending the ship's departure was filthy in the extreme. Properly filled, the steerage would accommodate about 250 persons, whereas nearly 500 where crowded into it. The living on board was wretched, and for the tea and coffee water was used which was foul beyond description. The sanitary arrangements may be judged by this one fact—the closets for the males and females respectively (nearly 500) were on either side of the steward's cabin where the food stood before being served out at each meal! We would defy even Mark Tapley to have been "jolly" under such circumstances. This is not the first time that complaints of a similar nature have reached us, and it appears to be quite time that Government, through our consuls, should make inquiries as to the condition of the emigrant ships sailing with British subjects on board from foreign ports. If it be found that by means of agents employed in London, and through advertisements in the London papers, English emigrants are induced to embark in vessels in which the salutary regulations enforced on English ships are neglected, Government should at once take steps to put a stop to the evil, at least so far as concerns the interests of British subjects. No booking of emigrants should be allowed at any office in England unless the agent be prepared to show that the vessel in which they were to be conveyed had fully complied with all the Government regulations.

THE OSSEOUS LESIONS IN LOCOMOTOR ATAXY.

AN account of a fresh investigation into the minute changes in the bones in ataxy has been published by M. R. Blanchard, in the *Gazette Médicale de Paris*. It had been previously ascertained that the essential change is absorption of the bony tissue around the Haversian canals, most marked in the neighbourhood of the medullary canal, and that the disappearance of the bony structure is preceded by a localised decalcification. The present investigation has been undertaken to compare this change with the clinical symptoms, and to ascertain whether it is the same in the cases which present fracture of the long bones or atrophy of the epiphyses, phenomena which are not commonly associated in the same patient. The examination has been made on the bones contained in the Salpétrière museum the history of which was well known. The result has shown that the lesions are exactly the same in the two sets of cases. The only differences found are those of degree, and do not explain the difference in the symptoms. M. Blanchard is inclined to explain the fact that patients with disease of the head of the bone do not suffer from fractures of the shaft by the impairment of movement which the former causes, which prevents the limbs being used with sufficient force to cause the spontaneous fractures. Whenever the heads of the bones are eroded, the shafts present the same change as in those which have broken. The converse, however, is not true; the change in the shaft may be met with, and yet the ends of the bone may present no erosion.

MANAGEMENT OF PRISONS.

AN influential deputation met the Home Secretary a few days ago, to lay before him resolutions passed at the Conference of the Prison Visiting Committees, held at the Westminster Palace Hotel on the 31st ult. The Home Secretary, after the resolutions had been brought forward, promised that they should at once receive the attention they deserved. Among some of the more important recommendations to which he promised especial attention would be paid we notice the following: better provision for the isolated treatment of prisoners suffering from fever; all post-mortem examinations of bodies of prisoners to be conducted by independent medical men; the punishment of female prisoners in dark cells to be abolished; the discontinuance altogether of the use of plank-beds in the case of women, and the modification of this kind of punishment in the case of men. These are matters to which THE LANCET has repeatedly drawn attention, and we hope the much-needed reforms in this direction will ere long be effected. We should also be pleased to learn that the effect the new prison dietaries had on the health of the prisoners generally had not been overlooked. We have frequently

pointed out the severe character of the diet for short-termed prisoners, and that, taking the diets of all classes, the punishment falls very unequally; for while the agricultural criminal would only feel the reduction in quantity, the town convict would be affected by the alteration in quality as well as by the lessened quantity. Most of the mishaps that have occurred during the last three years, since the introduction of the new diets, have arisen among short-termed prisoners, or during the early period of the confinement of those sentenced for a longer term.

STORED ELECTRICITY.

THE public attention directed to the importance of the possibility of storing force and using it economically when needed cannot but bring about results of the greatest importance. The practical mind of M. Faure and the genius of Professor Thomson have attained results from the important discovery made some three or four years since by M. Planté of which the original inventor possibly scarcely dreamt. The Planté polarisation cell, of which M. Faure's battery is a modification, is composed of two sheets of lead wrapped spirally round each other, kept separate by the interposition of slips of vulcanite, and immersed in dilute acid. The cell is charged by being included in the circuit either of an ordinary electric battery or one of the modern electrical machines — Gramme's or Siemen's. As a result of this, the lead-plate in connexion with the positive pole of the battery or machine becomes oxidised on the surface. The cell is then disconnected, having, by the chemical electrolytic process induced in it, become itself a powerful battery capable of manifesting energy in proportion to the size of its plates and the amount of oxidation of one of them. The public is likely to be misled as to the originality of using a polarisation cell for medical purposes. This was done long ago, and indeed the polarisation cells made by Trouvé of Paris have been already found of great service, not only on the Continent, but in this country and in America. These (Trouvé's) elements have been used as a convenient source of light for medical and surgical purposes and for laryngeal and other kinds of mirrors. Endoscopes have also been made whose illumination is brought about by a platinum wire rendered incandescent by means of a Planté cell. The incandescent wire has also been employed as a cautery for minor surgical operations.

THE CONTAGIOUS DISEASES ACTS.

WE are glad to observe the satisfactory result of Sir W. Harcourt's inquiries into the charge, implied in a question by Mr. Hopwood, that the surgeons appointed under the Contagious Diseases Acts for the boroughs of Portsmouth, Windsor, and Southampton "had been made justices of the peace in order that they might carry out the Acts in a two-fold capacity — administering and executing the law." Sir W. Harcourt stated that he "found that the three gentlemen in question were justices of the peace; but they had assured him in the most explicit way that they did not act in any case connected with the Contagious Diseases Acts, and that they would think it highly improper to do so." In this view everyone must concur. The Acts are of great importance, and, as we have repeatedly pointed out, have effected much practical good; but it would be intolerable if those who are entrusted with the duty of putting them in force were to be permitted to sit in judgment upon any of the unfortunates who might be accused, rightly or wrongly, of contravening the police regulations. There can be no possible objection to the gentlemen referred to remaining on the commission of the peace so long as they adhere to their judicious determination to avoid adjudicating in any cases occurring under the Acts.

MAKING A RIOT.

IT is always with regret we feel compelled to draw attention to what may seem to be misconduct on the part of the police; but unless some more satisfactory explanation than has yet appeared is forthcoming of the "Riot in Southwark" on Sunday evening last, it will be impossible not to think that the force has been discredited by some of its members. It may be conceded that policemen have much to try their tempers. This, however, is no reason why they should first rush into an act of official folly and then lose their heads with excitement when they find the popular sympathy is against them. A young man, said to have lost his brother by drowning, became greatly excited, and, stripping off his clothes, was about to plunge into the water to recover the body. It was a silly and indecorous thing to do; though the time was evening, and but that a police-constable *happened* to spy the offender, nothing would have come of the affair. As it turned out, the policeman pounced on the young man, and he resisted. A struggle ensued, and assistance was procured. The roughs sided with the wrongdoer, and the police were badly treated. A magistrate has since sent the young man to prison for three months. It would be well if the Home Secretary ordered an inquiry into the matter. If the police were only half as zealous in protecting the public from the real and intentional or vicious offences committed against decency, even in "respectable" neighbourhoods, as they have shown themselves in this instance, and are wont to show themselves in pursuing little boys who try to pick up an honest penny by selling matches, there would be more order in our streets, and less frequent occasions for popular complaining.

EXPERIMENTS ON NERVE-STRETCHING.

SOME interesting experimental results of nerve-stretching have been obtained by M. Quinquaud. He lately showed to the Société de Biologie two guinea-pigs in which the sciatics had been stretched, and in which the operation had been followed by a spontaneous amputation of the two outer toes, innervated by the sciatic, while the inner toe, innervated by the crural nerve, was intact. The trophic changes resemble closely those which follow division of the nerve. On another guinea-pig he observed a very curious phenomenon. He stretched the sciatic on the right side, just enough to cause anæsthesia; then he stretched the other sciatic much more violently, so as to cause a strong excitation. The effect of the latter was to cause the sensibility in the right leg to return, and to be replaced, a few hours later, by hyperæsthesia. The experiment succeeds best in young guinea-pigs. This phenomenon, which he terms "mechanical transfer on irritation," shows that across the spinal cord there must be produced a modification in the action of the nerve-cells analogous to that which has been studied by Dr. Brown-Séquard. If the anæsthesia on the right side is of old standing it is not removed by stretching the left nerve. M. Marcus has found that if a stretched nerve is treated immediately with osmic acid, and transverse sections are examined, the axis-cylinder is seen to be no longer immediately enclosed by the myelin-sheath, but a zone, colouring yellow, intervenes between the two. At subsequent periods the signs of degeneration in the nerve are found. The third day after the operation numerous fibres appear intact, but in others the myelin has become segmented, and the axis-cylinder has disappeared. In some the latter persists, and the outer sheath is closely applied to it, the myelin having gone. The nuclei of the neurilemma are increased in size and number. These changes are much more marked in guinea-pigs than in cats, even when care is taken to render the operation as nearly as possible similar in the two animals. In the cat,

however, the spot stretched becomes distinctly swollen, and the lesions above described have been found in the central, and not in the peripheral, part of the nerve. In some cases the lesions are very slight. In one cat, in which the sciatic was stretched so as to cause complete anæsthesia, no histological changes could be found either in the nerve-trunk or the posterior spinal roots.

THE SANITARY CONDITION OF THE HOTELS OF ROME.

WE are glad to learn that a proposition to discuss, by the Italian Medical Association, with reference to the *Italian Times'* Sanitary Commission, the "measures to be taken in view of the arbitrary interference of certain foreign medical practitioners with the hygienic condition of the Roman hotels," has been suffered to lapse. But an Italian physician has addressed an article to the *Popolo Romano* questioning the right of foreign physicians to interfere with Roman sanitary questions. It would appear, however, from this article, that other than structural arrangements in the hotels should enter into the consideration of the commission, and be borne in mind by visitors. This Italian physician relates the following story:—"A short time since a Protestant clergyman attended a lady, one of his co-religionists, who died of typhoid fever in one of the principal hotels of Rome. The next day the same clergyman called on a bishop, who had just come to Rome, and had gone to lodge in the same hotel. To his great surprise he found him occupying the very room in which the lady had died of typhoid fever the day before." "The Italian physician," the *Italian Times* remarks, "sees nothing disquieting or improper in this." We apprehend that English visitors to Rome, at least, will see much to disquiet them, and it is well to have the assurance of our contemporary that the Roman hotel-keepers are welcoming the Sanitary Commission which it has established.

RHABDITIS GENITALIS.

THE above is the name given by Schreiber to a microscopic round worm of the genus Rhabditis, that he has found in the urine of a female patient. The woman was thirty-five years of age, and suffering from advanced pulmonary disease. The urine contained pus, was feebly acid, and quickly became alkaline. On examination of the sediment, large quantities of peculiar worms were found in it. The smaller ones were asexual, mostly dead, and only one-fourth or one-fifth of a millimetre in length; the larger were sexually mature and alive. Of these the males were about one millimetre long, with expanded wing-like tails; the females were rather longer, had conical heads, and narrow, pointed caudal extremities, and contained eggs in various stages of cleavage. The external genital organs and the vagina were thoroughly cleansed, with the result of completely freeing the urine from the parasite. It was thus made abundantly clear that the worm was not a urinary, but a genital parasite, and only accidentally mixed with the renal excretion. This adds another to the known list of animal parasites.

HEALTH OF THE FRENCH TROOPS IN TUNIS.

VARIOUS reports have been current for some time concerning the unsatisfactory sanitary condition of the French army in Tunis; but from an official statement, emanating from the Minister of War, it would appear that these are incorrect. From the 25th to the 31st of May the proportion of sick, including those suffering from fever, was two per cent. of the whole strength, whereas the mean proportion of sick for the whole of France was four per cent. It is also stated that the medical department is prepared to meet any emergency, having sixteen hundred vacant beds at its disposal in the hospitals of the province of Constantine, and in the ambulances of Tunis. The evening papers of Tuesday (*Le Temps*, *La Liberté*, *La France*, *L'Estafette*, and probably also others) publish a note communicated by the Havas Agency, contradicting a statement which appeared in *The Times*, concerning the prevalence of typhoid fever amongst the French troops. It runs as follows:—"*The Times* has published, on the sanitary condition of the troops in Tunis, and on the supposed ravages made by typhoid fever, information which is entirely untrue [*inexact*]. We are in a position to rectify it. In reality, the number of sick or wounded of the expeditionary corps at present in the hospitals of the Regency and of the province of Constantine (Bone, La Calle, Guelma, Soukahrrhas), where the sick of the different columns have been evacuated, amounts to 486, which for a total of 26,300 men gives a proportion of two per cent."

TRICHINA-LIKE PARASITES.

TO microscopists who are endeavouring to ascertain the various habitats of trichinæ, a useful word of warning has been given by M. Mégnin in a paper read before the Société de Biologie, in which he points out that many minute encysted worms are met with which are not trichinæ, although so closely resembling them as to have deceived many observers. The supposed discovery of trichinæ in the rootlets of beetroot, proved to be a mistake by Virchow and Kuhn, is a striking instance of this sort. Langenbeck described trichinæ in the intestines of earth worms, but Kuhn showed that the parasite is quite distinct from the trichina spiralis. Merlan and Tigri thought they had found trichinæ in the lungs of sheep, but Delpech showed that these were merely the embryos of strongylus filaria. Cobbold has stated that the trichina is common in the hedgehog. Mégnin is convinced that this is an error, and that the worms described are merely the encysted larvæ of the spiroptera clausa. He showed preparations of an encysted nematoid worm, which might easily be mistaken for the trichina, but pointed out that the former differs in having a papilla at its mouth, and the anus is not terminal. Siebold described as a trichina a worm found in cysts in the peritoneum of the grey lizard and other creatures, but Mégnin asserts that this also is the larva of a spiroptera (S. abbreviata), the adult individuals of which are abundant in the intestines of the same animal. An encysted spiroptera still more strikingly resembling the trichina has been found in the muscles of the frog. Very similar, but larger, encysted worms of the same genus have also been discovered in the subcutaneous tissues of a bird, the manchetes pugnax.

THE NEW EXHILARANT.

OUR readers probably observed with some surprise the announcement in *The Times* of the remarkable exhilarating effect stated by M. Luton of Rheims to be produced by a not very unusual combination of drugs, ergot of rye and phosphate of soda. In case they may desire to make some observations on the point, we give the doses alleged to produce the extraordinary effect. Tincture of ergot of rye five grammes (about eighty-five minims); phosphate of soda twenty-two grains: dissolved in a small quantity of water, and taken in a single dose, fasting. The effect on the first patient was manifested in three-quarters of an hour. She laughed continuously for half an hour, and each dose was followed by similar effects. Another patient in the same ward begged to take so delightful a drug, and manifested similar effects, and so also did an old woman of seventy-one. In a chlorotic girl it caused at first some nausea, then flushing of the face; an agreeable warmth spread over the body, and shouts of laughter burst forth and continued during

the greater part of the day. In men, however, no such effects were produced—merely slight giddiness and headache.

MEDICAL WORTHIES OF BRADFORD.

THE *Bradford Observer* of May 17th contains a paper by Dr. J. H. Bell, entitled "Fragments of Local Medical History," which we have read with much interest. The sketches of medical men associated by birth, connexion, or practice with Bradford are very well drawn, and supply many social and professional data of real historic value. The list begins with Dr. Bartlett, F.R.S., born in Bradford in 1718, and includes the great and good Dr. John Fothergill, who was a friend of Bartlett. A medical man is not badly employed in reviving in a community the memory of men of his own profession; and that Dr. Bell should have found time to do this at a moment when he is so honourably distinguished in connexion with a piece of good medical and pathological research, is a new proof of an old truth—that the study of the old and the new often go well together, and that one kind of work serves as recreation in respect to another.

THE PIROGOW JUBILEE.

M. PIROGOW'S jubilee, celebrated at Moscow on the 6th inst., was made the occasion of an extraordinary demonstration in honour of the distinguished Russian surgeon. The State, scholastic, literary, and scientific circles, and the people generally, all crowded to do honour to the jubilee, and the detailed accounts of what transpired fill much space in the Russian journals. Addresses were read in honour of the occasion from all parts of the empire, and from numerous foreign universities.

THE Throat and Ear Hospital, Newcastle-on-Tyne, was last week visited by Dr. Yong Ton Wong, the native physician on board the *Hae Shin*, accompanied by his assistant and interpreter. The doctor, who is about forty years of age, studied at Canton, of which city he is a native. The visitors were received by the honorary secretary, and Mr. Ellis, the senior-surgeon, and appeared to be much interested in the examination of the out-patients. They showed good acquaintance with the use of electricity and galvanism in the treatment of disease, and stated incidentally that Chinese medicine aimed at prevention rather than cure, and that they preferred to save a limb rather than to sacrifice it by an operation.

DR. GEE, physician to St. Bartholomew's Hospital, has recently had under care in the wards a girl, fourteen years of age, suffering from chorea. About ten days after chloral hydrate was prescribed for her in frequently-repeated doses, a characteristic eruption, now known to be due to the administration of this drug, appeared upon the upper part of the chest, elbows, and buttocks. Consisting essentially of a lichenous type, the papules were generally large, of a dusky hue, and surrounded by much cutaneous redness. An example of this interesting skin lesion—also under Dr. Gee's care—was noticed in THE LANCET of January 1st.

AN accident, which at one time caused serious alarm, occurred in the Anatomical Schools of Cambridge University last week. By the ignition of some spirit the preparation room caught fire, to which apartment, however, it was, by the exertions of the servants of the museum and of the fire brigade, fortunately confined. No specimen of value appears to have been destroyed, though the room was much damaged.

ON Monday last, the Bishop of Gloucester and Bristol distributed the prizes to the successful students of the Bristol Medical School. The report read by Dr. Markham Skerritt referred to the facts that the building in which the work of the school is carried on is a temporary one, and that, owing to the increase in the number of students, additional accommodation is urgently required. The Bishop, in the course of his address, deprecated specialism, and spoke forcibly on the need, in medical practitioners, of a broad and general knowledge of the human frame and its diseases.

THE suit instituted by a Mrs. Morgan in the Supreme Court of the United States against Dr. Lewis H. Sayre, in which the plaintiff demanded 25,000 dollars damages for alleged injuries to her constitution from the improper administration of nux vomica, has, as was to be expected, resulted in a verdict for the defendant.

MR. JOHN TWEEDY, F.R.C.S., has been elected Professor of Ophthalmic Medicine and Surgery at University College, on the retirement of Professor Wharton Jones, F.R.S. Mr. Tweedy has also been appointed Assistant Ophthalmic Surgeon to University College Hospital.

THE Boylston Prize of Harvard College, U.S., for 1881, has been awarded to Mr. Herbert Page, of St. Mary's Hospital, for the best essay on "Injuries of the Back, without apparent Mechanical Lesion, in their Surgical and Medico-legal Aspects."

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Holsworthy, Rural (*Devonshire*).—Population, 1871, 9427; area 81,810 acres. Mr. Linnington Ash reports for 1880 a birth-rate of 29·17 per 1000 living, and a death-rate of 19·62. Of this death-rate he remarks that although somewhat lower than the average of all England, it is a high rate for an extensive, high, moorland, and sparsely populated district—higher, indeed, than ought to exist. An exceptional prevalence of certain zymotic diseases appears to have contributed largely to the comparatively high mortality, especially measles and scarlet fever. The sanitary organisation of the district is still so imperfect as to place successful attempts to limit the prevalence of infectious diseases out of the question. There are no public means of isolating patients, and isolation in the cottages of the poor is practically impossible; disinfection, too, as practised in the district, is described by Mr. Ash as "perfectly useless and illusory. It is done in a desultory, unmethodical, and unscientific manner, as might be expected in the absence of proper public means for the purpose being provided by the authority." In respect to the closure of schools, Mr. Ash observes, in regard to measles: "Schools were temporarily closed in nearly every parish, but always too late to be of use, for the most infectious stage of measles is the commencement, even as soon as, or before, the characteristic rash appears. More than a dozen children attending one of the schools in Holsworthy were struck down with the disorder during one afternoon." Scarlet fever, it appears, spread from village to village, "chiefly through the means of elementary schools for combined districts." The present report is the sixth annual one which Mr. Ash has been called upon to make for this district. He comments upon the fact that no systematic records are yet kept of the work done by the inspector of nuisances, and that no systematic survey for sanitary purposes has been made. Much has been done in respect to sanitary work since the district was formed, and progress is being made; but it is obvious that much remains to be done, and that from the want of the work which has been done, and is

now being done, not being carried out in the orderly way which Mr. Ash advises the full utility it should have for the district is not obtained.

Cambridge (*Urban*).—Dr. Bushell Anningson reports for this university town and district for 1880 a death-rate of 16·4 per 1000 living, but he thinks it desirable to repeat a caution that a low general death-rate should not be taken by itself as an expression of healthful conditions of a town, and he further says of Cambridge that, "like a weakly creature, she 'catches any complaint that is going.'" The complaint "going" in 1880 was diarrhœa, and Cambridge did not escape; and, in consequence, came in for the polite attentions of the Local Government Board inviting contribution to the investigation as to diarrhœa, which is now being carried out by Dr. Ballard. The cream of the contribution which Cambridge will make to Dr. Ballard we may assume is given in this report. Dr. Anningson describes the meteorological conditions under which the considerable prevalence of diarrhœa among infants and young children occurred in the town, but shows that such influence as they exerted in the production of the disease was manifested not generally over the town and district, but was confined to certain limited localities. He then proceeds to examine into the peculiar conditions which might determine these localisations, and particularly of the district upon which the incidence of the diarrhœa most markedly fell. He observes:—"That focus comprises not only the courts and alleys and yards where the air stagnates, undisturbed except by a breeze from the sewer, but even streets that might be considered fairly ventilated. The conclusion to which I am rather unwillingly led (I say unwillingly, because if I am right the remedy is difficult of application), is that the infected area lies along the line of sewers of low rate of inclination in poor neighbourhoods, where less heed is paid to traps. So slight, indeed, is the inclination, that the sewage is practically stagnant, and ferments, producing gases which press with great force, as I know by direct experiment, upon the traps in some of the scullery sinks. The evil, doubtless, would be palliated by ventilation of the sewer all along its line (a matter to which I called attention in my first report—viz., that for 1875). There would even then be foul gas in the streets, but in a less concentrated state."

Fulham.—Mr. Collier, in his report for the first quarter of the present year, gives the rate of mortality as equal to 20·0 per 1000 of the population of the district, as compared with 23·3 for the whole of the metropolis. He has the following observations upon small-pox in the district:—"In my last quarterly report, attention was called to the fact, that a large number of cases of small-pox were being removed from other districts of the metropolis to the Metropolitan Asylum Hospital at Fulham, for the purpose of isolation. An opinion was expressed that an outbreak of small-pox would occur in the parish of Fulham, as a result of the course that was then being adopted. At the time of the presenting of that report, there had been no case of small-pox reported in the parish of Fulham for a period of over three months. During last quarter, 97 cases were reported in this district, against 3 cases in the previous quarter, and against 33 in the corresponding quarter of the previous year. Of the 97 cases reported last quarter, 75 occurred in the parish of Fulham and 22 in the parish of Hammersmith, against none in the parish of Fulham, and 3 in the parish of Hammersmith reported the previous quarter; 58 of the patients were males and 39 females. The ages varied from two weeks to sixty-three years. The average ages was 21·7 years. Eighty-two of the patients had been once vaccinated; 8 had not been vaccinated. In the remaining 7 cases, no information as to vaccination was obtained. These 97 cases occurred in seventy-two houses in fifty-nine streets. In forty-seven streets the outbreak was confined to one house in each street; 40 cases occurred singly in different houses in different streets; in twelve streets there was more than one house attacked in each street. In one street, there were three houses attacked in the same street, and in eleven streets there were two houses attacked in each street. In sixty-three houses, there was only 1 case in each house. In nine houses, there was more than 1 case in each house. Thus, in one house there were 8 cases in the same house; in one house there were 5 cases in the same house; in three houses there were 4 cases in each house; in one house there were 3 cases in each house, and in three houses there were 2 cases in each house. Of the 97 cases, 5 deaths have as yet been registered, which equals a mortality of 5·1 per cent. 91·8 per cent. of the cases were removed to a hospital and properly isolated; 89 cases were removed to the Metropolitan Asylum Hospital at Fulham—88 by your board and one by St. Thomas's Hospital authorities. The patient applied there for medical advice, not knowing the nature of his complaint. One case was not reported till after the death of the patient; 5 cases were not reported till after the recovery of the patients, and in 2 cases the removal was objected to. The accommodation in these latter two cases was by no means satisfactory for the effectual isolation of the patients, but was not sufficiently bad within the meaning of the thirty-eighth section of the Sanitary Act, 1866, to justify an application to the magistrate to enforce removal. Only 12 of the cases were within a half-mile radius of the Fulham Small-pox Hospital, while 85 were without about a half-mile radius. These facts are opposed to the theory that the disease is caught by the germs being carried through the air from the hospital. Under such circumstances, the houses that are in the nearest proximity to the hospital would be most affected by the disease. The very large number of cases that have occurred in the *three parishes* that are in the nearest proximity to the hospital, as compared with those parishes that are more distant, is, on the other hand, the strongest evidence *that the presence of the hospital in the locality is the cause of the disease being more prevalent in that locality*." In his observations upon the diffusion of "germs," Mr. Collier gives no clue to the respective populations living within and without the half-mile area from the hospital, and among whom the cases to which he refers occurred.

ALLEGED DEATH FROM REVACCINATION.

With regard to the reported death of a lady at Sittingbourne from revaccination, to which we referred a fortnight ago, we learn from the medical gentleman in attendance (Dr. C. H. Fisher), that there was not the least connexion between the revaccination and the cause of death. The revaccination failed, and the erysipelatous affection from which she afterwards died had no connexion with the spot where the vaccine lymph had been inserted.

MISTAKING SMALL-POX FOR CHICKEN-POX.

Dr. Orme Dudfield, in his report for May, directs attention to the extension of small-pox from the lower classes in the social scale to the higher; and he gives a curious instance of a succession of cases of presumed chicken-pox proving to be modified small-pox, and the error leading to a regrettable diffusion of the malady.

It would appear from the last meeting of the Metropolitan Asylums Board that the second ship asked for from the Admiralty, the *Endymion* frigate, is to be used for the administrative staff attached to the *Atlas*, and that it is contemplated to fit up the latter ship for 250 patients. The Admiralty have also lent to the Board a steam pinnace to facilitate its arrangements. It would seem probable that the *Atlas* and *Endymion* will be moored off Greenhithe, but the riverside authorities, the Port of London Sanitary Authority, and the Thames Conservators are all throwing difficulties in the way of the Asylums Board establishing a floating small-pox hospital in the river, and it is to be surmised that the Board have been at no pains to remove these difficulties before they started their scheme. One of the members during the meeting, with reference to certain communications made to the Asylums Board by the Local Government Board, and the little help they received from the latter body, aptly said that the Board desired the managers "to pull the chestnuts out of the fire."

The Manchester Corporation, in view of the annual deficit in the receipts as contrasted with the expenditure of the Monsall Fever Hospital, belonging to the Royal Infirmary, has agreed to pay an increased sum for the maintenance and treatment of each case sent there under their authority. Doubtless other sanitary authorities making use of the hospital will follow a similar course.

If the medical officer is permitted to keep a dog in a workhouse, why not the matron, or, indeed, any other officer? This question has been occupying the serious attention of the Shoreditch guardians, and has been decided by conceding the same privilege to the matron as to dog-keeping as the medical officer.

Dr. Bristowe, the medical officer of health for Camberwell, has been delivering a series of lectures on sanitary matters in the Vestry Hall of the parish. The lectures were largely attended and highly appreciated.

The medical officer of health for Peterborough city, Dr. W. Sinclair Thomson, has resigned his post, which he had held since 1873. The thanks of the Town Council were voted to Dr. Thomson for the efficient manner in which he had performed the duties of his office.

The sanitary inspectors of Holborn and Clerkenwell, it is reported, have been giving attention to the probability of small-pox being spread by the sale of second-hand clothes, and are endeavouring to avert danger from this source.

The Cambridge Urban Sanitary Authority have determined to erect an infectious disease hospital, and to take measures for diverting the sewage of the town from the Cam.

The vaccination officer for Bethnal Green recently reported that a three weeks' house-to-house visitation of his district had led to the discovery of about 600 unvaccinated children.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

English urban mortality showed a marked decline, and was exceptionally low last week. In twenty of the largest English towns, estimated by the Registrar-General to contain in the middle of this year a population somewhat exceeding seven and a half millions of persons, 4718 births and 2737 deaths were registered last week. The births were 458, and the deaths so many as 520, below the average weekly numbers during 1880. The annual rate of mortality in the twenty towns, which had been equal to 20·0 and 20·3 per 1000 in the two preceding weeks, declined last week to 18·8; this is the lowest rate that has prevailed in these towns in any week since the end of September last. The lowest rates in the twenty towns last week were 14·0 in Brighton, 14·6 in Portsmouth, 15·1 in Wolverhampton, 15·3 in Plymouth, and 15·4 in Newcastle-upon-Tyne. The rates in the other towns ranged upwards to 21·4 in Salford, 21·7 in Manchester, 22·7 in Liverpool, and 23·0 in Sheffield. During the first ten weeks of the current quarter the death-rates in the twenty towns averaged 20·9 per 1000, against 23·0, the average rate in the corresponding periods of the five years 1876–80.

The deaths referred to the principal zymotic diseases in the twenty towns, which had been 452 and 446 in the two preceding weeks, declined to 401 last week; these included 106 from measles, 91 from whooping-cough, 63 from small-pox, 55 from scarlet fever, 45 from diarrhœa, 27 from fever (principally enteric), and 14 from diphtheria. The annual death-rate from these principal zymotic diseases averaged 2·7 per 1000 in the twenty towns, and ranged from 0·0 and 0·5 in Newcastle-upon-Tyne and Brighton, to 4·1 and 5·9 Liverpool and Leicester. Measles showed the largest proportional fatality in Bristol, Sheffield, and Liverpool; scarlet fever in Norwich, Oldham, and Birmingham; and whooping-cough in Leicester, Portsmouth, and Birmingham. Of the 14 deaths from diphtheria in the twenty towns, no less than 11 occurred in London. The death-rate from fever, principally enteric, was exceptionally low in the twenty towns last week; it was highest in Portsmouth and Hull. The fatal cases of diarrhœa, principally infantile, showed an increase last week, but were below the average for the season. Small-pox caused 67 more deaths in London and its outer ring of suburban districts, 2 in Liverpool, and 1 each in Brighton and Hull; no fatal case of this disease, however, was registered in any of the sixteen other large provincial towns. The number of small-pox patients in the Metropolitan Asylum Hospitals, which had steadily increased from 942 to 1644 during the five preceding weeks, was 1633 on Saturday last, including 621 inmates of the Convalescent Camp Hospital at Darenth. The new cases admitted to these hospitals, which had been 402 and 359 in the two previous weeks, declined to 293 last week. The Highgate Small-pox Hospital contained 83 patients on Saturday last, against 84 and 86 at the end of each of the two previous weeks respectively; 19 new cases were admitted to this hospital during the week. These figures afford evidence that the decline of small-pox fatality, which is usual at this time of the year, has now set in.

The deaths referred to diseases of the respiratory organs in London, which had been 241 and 249 in the two preceding weeks, fell to 216 last week, and were 25 below the corrected average weekly number; they included 120 from bronchitis and 70 from pneumonia. The annual death-rate from lung diseases, exclusive of phthisis, did not exceed 2·9 per 1000 in London last week; while the rate from the same diseases was 4·8 in Liverpool and 4·2 in Salford.

The causes of 69, or 2·5 per cent., of the deaths in the twenty towns last week were not certified either by a registered medical practitioner or by a coroner. The proportion of uncertified deaths in London did not exceed 1·5 per cent., whereas it averaged 3·5 in the nineteen provincial towns. No uncertified deaths were registered last week in Portsmouth, Norwich, or Birmingham; whereas the proportions of such deaths were largest in Sunderland, Leeds, and Sheffield.

HEALTH OF SCOTCH TOWNS.

In eight of the largest Scotch towns, having an estimated population of rather more than a million and a half of persons, the annual death-rate last week declined to 18·7 per 1000, from 20·6 in the previous week; this rate was 0·1 below the average rate last week in the aggregate of the twenty large English towns. The rates in these eight Scotch towns ranged last week from 15·7 and 17·9 in Dundee and Glasgow, to 21·2 and 21·7 in Paisley and Leith. The rates of mortality in the Scotch weekly return are not yet calculated upon estimates of population based upon recently enumerated numbers; it is said to be probable that the rates in some of the towns are over-stated through an under-estimate of their present population. The deaths referred to the principal zymotic diseases in the eight towns were 65 last week, against 72 and 62 in the two preceding weeks; they included 19 from diarrhœa, 17 from whooping-cough, 11 from "fever," 6 from measles, 6 from scarlet fever, 5 from diphtheria, and one from small-pox. The annual death-rate from these zymotic diseases averaged 2·6 per 1000 in the eight towns, and was 0·1 below the average rate from the same diseases in the twenty large English towns. This zymotic death-rate ranged in the eight Scotch towns from 0·0 and 1·9 in Perth and Aberdeen, to 3·2 and 5·2 in Greenock and Leith. The 19 deaths referred to diarrhœa showed an increase of 5 upon those returned in the previous week, and included 8 in Glasgow, 4 in Greenock, and 2 each in Dundee, Aberdeen, and Leith. The fatality of this disorder was more than twice as great as that which occurred last week in the large English towns; 17 fatal cases of whooping-cough showed an increase of 3 upon the number in the previous week; they included 11 in Glasgow and 4 in Edinburgh. The 11 deaths referred to "fever" (including typhus, enteric, and simple) showed a further slight increase upon recent weekly numbers; 5 occurred in Glasgow and 3 in Edinburgh. The annual death-rate from this cause in the eight towns was equal to 0·44 per 1000, and was more than twice as high as the average fever rate in the twenty English towns. The 6 deaths from scarlet fever showed a decline of 7 from those in the previous week, and included 4 in Edinburgh. Four of the 6 deaths from measles were returned in Glasgow. The fatal case of small-pox was of an unvaccinated infant, aged four months, in Glasgow. The deaths attributed to acute diseases of the lungs (bronchitis, pneumonia, and pleurisy) in the eight towns, which had been 89 and 106 in the two preceding weeks, declined again to 95 last week, and were equal to an annual rate of 3·8 per 1000; the rate from the same diseases in London did not exceed 2·6.

HEALTH MATTERS GENERALLY AT HOME AND ABROAD.

HEALTH OF CALCUTTA.

Dr. K. McLeod's report for the first quarter of the present year on the health of Calcutta shows an unusually low mean temperature of the period, a quarterly total of deaths exceeding the decennial mean by 362, and, with the exception of bowel complaints, a decrease in the mortality from specific diseases below the mean of the preceding ten years. The mortality from cholera was below the mean, although higher than in either of the two preceding years. "An outbreak of considerable severity occurred in a bustee to the north of Sakea's-street, which subsided when the use of the water of a tank in the middle of the village was prevented by putting a police guard over it. A similar result happened in Parsee bazaar, a bustee near Machua Bazaar-street, where the people of their own motion discontinued the use of the water of a large tank situated in that village." The deaths from diarrhœa and dysentery were slightly in excess of the decennial mean; those from small-pox below; but the number of

deaths from "other causes" (convulsions, tetanus, phthisis, liver and spleen diseases, &c.) was unprecedentedly large. A very general prevalence of measles interfered with the progress of vaccination, but it is hoped that next season the new law and arrangements will be in efficient working order.

THE ADULTERATION ACT IN GLASGOW.

The difficulty of dealing with adulteration, especially as regards such an article as milk, has again been shown in a case recently decided in the High Court of Justiciary. Mr. James Morton, once of City Bank notoriety, now a milk-dealer, near Paisley, was convicted a few months ago in the Sheriff's Court of having sold cream which consisted to the extent of 34 per cent. of skim-milk, and a fine was inflicted. Mr. Morton appealed to the higher court, however, and not in vain, his defence being that the cream sold was intentionally a cream of inferior quality, such as he knew his customers wanted and could pay for, and that he was quite willing to supply a better quality of cream at double or treble the price; it was all a question of price. The judges supported him in his contention, upset the standard of cream adopted in the lower court, and, apparently holding that the true end of the Sale of Food Act would be served if it prevented adulteration in the proper sense of the word—the addition of any foreign ingredients,—quashed the sheriff's decision. Inferiority in the quality of food sold, therefore, does not expose the seller to the penalties set forth in the Act.

TYPHUS IN ST. PETERSBURG.

It would appear from the *Medical Gazette* of St. Petersburg that that city is experiencing almost as great a difficulty as to hospital accommodation for cases of typhus as London is now experiencing in regard to cases of small-pox. Typhus has so largely increased in the northern city during the past three months that the hospitals prepared for its reception no longer suffice for the hosts of applications, and considerable numbers of patients have to be treated in their own homes. The demands of the epidemic in respect to bed accommodation in the special hospitals have been under estimated, and it is intimated that the failure of the municipality to provide a permanent hospital for typhus, which prevails more or less in St. Petersburg every year, must be held accountable in part for the great development which the malady has recently undergone. The mortality from the disease is also stated to be exceptionally great.

On Tuesday last Mr. Burt, M.P. for Morpeth, was summoned for non-compliance with a vaccination order made in April last, respecting one of his children. Mrs. Burt, who appeared for her husband, admitted the charge. The Bench inflicted a fine of 20s., and suggested to Mrs. Burt that she should read the evidence recently published, showing the great liability of unvaccinated persons to small-pox.

The purification of the river Yarra-Yarra, Melbourne, is a question that appears to be coming to the front in the colony. The water-supply of the capital of Victoria is beginning to excite great dissatisfaction.

We hear that Mr. John Vance, L.R.C.P., and his wife, are suffering from the evil effects of diphtheria, contracted by him in the discharge of his professional duties in the West Ham district.

A camp hospital for the reception of cases of infectious disease has been opened at Finchley by the vestry of St. Mary's, Islington.

Diphtheria is reported to be prevailing extensively at Stockdale, Ontario.

THE SERVICES.

EXCHANGES OF MEDICAL OFFICERS SERVING IN INDIA.

The following appears in Army Circulars, June 1st, 1881.—Clause 129: medical officers serving in India who may wish to exchange to England, under the provisions of General Order 43 of 1881, will be required to forfeit their pay for the interval between their departure and their successors' arrival.

Brigade Surgeon F. R. Wilson, M.B., half-pay, Army Medical Department, has been appointed to the medical charge of the Brigade Depôt, Perth.

Surgeon-Major William Niven, M.D., of the Bombay Army, and Surgeon Henry Ogilvie Stuart, of the Bengal Army, have retired from the service.

Surgeon-General William Munro, C.B., has arrived in England from Gibraltar, on leave of absence.

Brigade Surgeon Wm. Cattell has embarked for Malta for duty, vice Brigade Surgeon Hiffernan, deceased.

Surgeon-Major A. F. Bradshaw, late Surgeon to the Commander-in-Chief in India, has been ordered to Devonport for duty in the South Western District.

ADMIRALTY.—Fleet Surgeons Charles Strickland, to the *Minotaur*, vice Francis T. Toms; Samuel Campbell, to the *Northumberland*, vice Gordon Jackson; Gerald Molloy, to the Plymouth Division of the Royal Marines, vice Henry Loney. Staff-Surgeon Alexander M'Donald, to the *Achilles*, vice Gerald Molloy. Surgeon and Agent Daniel Maguire, to Portavad, vice Robert M'Munn.

ROYAL COLLEGE OF PHYSICIANS.

THE adjourned meeting of the Comitia of the Royal College of Physicians to continue the consideration of the communications from the Secretary of the Medical Acts Commission, was held on Wednesday last, the President, Sir W. Jenner, Bart., in the chair.

Notice had been given to move the following resolutions:—

1. "That the College would regard with strong disapproval any proposal to establish a new licensing board or body which would practically supersede the power to grant licences conferred on the College by charter of King Henry VIII., which licence is the only one granted in this kingdom that confers on its holder a complete qualification to practise medicine, surgery, and midwifery, in all their branches." 2. "That the College could not consent to any interference with the mode in which it confers the distinction of Fellowship on its members." 3. "That the above resolutions be forwarded to the Secretary of the Medical Acts Commission, with an expression of the readiness of the College to depute one or more of its Fellows to give information on the above, or on any other subject named in the circular letter of May 23rd, which the Medical Acts Commission may consider that the College can supply."

The first of these resolutions was moved by Dr. Sieveking, seconded by Dr. Russell Reynolds, but withdrawn in favour of the following, which was proposed by Dr. Wilson Fox, seconded by Dr. Hermann Weber, and adopted after much discussion, in which Drs. Priestley, Barclay, Buchanan, and Greenhow took part. As to the wording of the resolution, it ran as follows:—"That this College feels it right to submit to the Medical Acts Commission that the appointment of a new licensing board, independent of the Royal Colleges of Physicians and Surgeons, is not only unnecessary, but would be likely to be prejudicial to the interests of the public, and to injure the profession, by lowering the number of licentiates of this College, and creating a body of licensed practitioners over whom neither the College of Physicians nor the College of Surgeons could exert any control. The College believes that the qualifications implied in the possession of its licence are adequate evidences of professional knowledge, and that its licence is esteemed alike by those holding it, by the whole of the medical profession, and by the public."

In the place of the above second resolution (the adoption of which was urged by Dr. Stewart) the following was moved by Dr. Sieveking and carried:—"That the College is of opinion that any material change in the manner in which the distinction of the Fellowship is conferred on its members would be highly prejudicial to the honour and dignity of the College, and would lower the estimation in which its Fellowship is now held by the profession and by the public."

It was also resolved (in lieu of the above No. 3 Resolution):—"That the Royal Commission be informed that the College has considered the letter sent to the College by the Secretary of the Medical Acts Commission, and has authorised its Registrar, Dr. Pitman, to attend and give information to the Commission on matters connected with the position, powers, and objects of the Royal College of Physicians;" and, on the motion of Dr. Maudsley, "That the Resolutions

adopted at this meeting be entrusted to Dr. Pitman, as instructions for his guidance in the evidence which he may give before the Royal Commission."

The President then nominated Dr. Poore to deliver the Bradshaw Lecture in August next, and the Comitia adjourned.

THE INTERNATIONAL MEDICAL CONGRESS.

SINCE we published the first list of officers nominated for election at the forthcoming meeting of the Congress only few changes have occurred. *Ex officio* Sir William Jenner, as President of the College of Physicians, presides over the Council; Dr. Burdon Sanderson is to take the place of Vice-president of the Pathological Section, rendered vacant by the death of Dr. Sanders; one of the Vice-presidents of the Congress, Dr. Hudson, has died, and a third secretary in the Surgical Section, Mr. Rickman J. Godlee, has been appointed. Sir William Jenner is to preside at a meeting of the General Council on June 23rd, and, afterwards, Sir James Paget, President elect of the Congress, will give a reception to the members of the Council. Application has been made to the various European railway companies to give special facilities to members of the Congress, and Lord Granville requested the British ambassadors to the foreign Courts to interest themselves in obtaining concessions. All the French railways, and the South Eastern, and the London, Chatham, and Dover Railways, will give return tickets at single fares. As already announced, the offices of the Reception Committee of the Honorary Secretary-General and of the Editors of the Daily Programme are at the Royal College of Physicians, where a reading and writing room will be provided for members of the Congress. We would draw special attention to the facts that the Reception Committee will be glad to receive the names of any persons desirous of entertaining members for the week; and a book has been provided for registering the private engagements of foreign visitors, which is already being rapidly filled up. The following daily programme has been issued as a provisional scheme:—

Tuesday, August 2nd, 10 a.m. to 6 p.m.: Registration of members and issue of tickets at the office of the Reception Committee in the Royal College of Physicians, Pall-mall East. *3 to 6 p.m.:* Reception of the members of the Congress by the Executive and Reception Committees at the Royal College of Physicians.

Wednesday, August 3rd, 8 a.m. to 6 p.m.: Registration of members and issue of tickets at the Royal College of Physicians. *11 a.m.:* First general meeting, St. James's Great Hall; address of welcome by the chairman of the Executive Committee; Secretary-General's Report; election of officers and constitution of the Congress; election of Honorary Presidents of the Congress; election of Honorary Presidents of the Sections; Inaugural address by the President of the Congress. *3 p.m.:* Meeting of the Sections; constitution of the Sections; and other business. *9 p.m.:* Conversazione at South Kensington Museum (entrance Exhibition-road), given by the English members of the Congress to the foreign members.

Thursday, August 4th, 10 a.m. to 1 p.m.: Sectional meetings. *1.30 to 3.30 p.m.:* Visits to hospitals—Guy's Hospital, London Hospital, St. George's Hospital, St. Mary's Hospital, St. Thomas's Hospital, Westminster Hospital. The medical officers and lecturers will be prepared to receive such members of the Congress as may desire to visit these hospitals, and to inspect their schools and museums. *2 to 3.30 p.m.:* Additional meeting time for the sections. *4 to 5.30. p.m.:* Second general meeting, theatre of the University of London; address by Prof. Maurice Raynaud, Paris, "Le Scepticisme en Médecine, au temps passé et au temps présent." *6.30 p.m.:* Banquet given to a certain number of the members of the Congress by the Lord Mayor of London, at the Mansion House.

Friday, August 5th, 10 a.m. to 1 p.m.: Sectional meetings. *1.30 to 3.30 p.m.:* Visits to hospitals—Bethlem Hospital, Charing-cross Hospital, King's College Hospital, Middlesex Hospital, St. Bartholomew's Hospital, University College Hospital. The medical officers and lecturers will be prepared to receive such members of the Congress as may desire to visit these hospitals and to inspect their schools and museums. *2 to 3.30 p.m.:* Additional meeting time for the sections. *4 to 5.30 p.m.:* Third general meeting, theatre of the University of London. Address by Dr. Billings, Washington, U.S., on "Our Medical Literature." *9 p.m.:* Conversazione at the Royal College of Surgeons.

Saturday, August 6th, 10 a.m. to 1 p.m.: Sectional meetings. *4 to 7 p.m.:* Reception of a certain number of the members at Kew Gardens by Sir J. D. Hooker. *4 to 7 p.m.:* A garden party will be given by Mr. and Mrs. Spencer Wells, at Golder's-hill, Hampstead. *6.30 p.m.:* The United Hospitals Club will entertain a party of the members of the Congress at dinner at the "Star and Garter," Richmond-hill.

Sunday, August 7th, 10 a.m.: A service will be held in Westminster Abbey; sermon by the Very Rev. Dean Stanley, D.D., F.R.S. *3.15 p.m.:* A service will be held in St. Paul's Cathedral; sermon by the Rev. Canon Liddon, D.D., D.C.L. *2 p.m.:* The Royal Botanic Society's Gardens and the Gardens of the Zoological Society, in the Regent's-park, will be open free to members on this and on every day of the week on presentation of their tickets. The Royal Gardens at Kew may be visited on Sunday from 9 A.M. till sunset, and Hampton Court Palace and Gardens from 2 P.M. till sunset.

Monday, August 8th, 10 a.m. to 1 p.m.: Sectional meetings. *2 to 3.30 p.m.:* Additional meeting time for sections. *4 to 5.30 p.m.:* Fourth general meeting, theatre of the University of London; address by Professor Volkmann, Halle. *6.30 p.m.:* Dinner given to a certain number of the foreign members of the Congress by the worshipful master and wardens of the Society of Apothecaries in their hall in Blackfriars. *9 p.m.:* Soirée in the Albert Hall, and the International Medical and Sanitary Exhibition, South Kensington.

Tuesday, August 9th, 10 a.m. to 1 p.m.: Sectional meetings. *2 p.m. to 3 p.m.:* Fifth general meeting, theatre of the University of London. Address by Professor Huxley, F.R.S., D.C.L., London, "The Connexion of the Biological Sciences with Medicine." *3 p.m.:* Concluding meeting of the Congress.

After the concluding meeting the members, accompanied by their friends, will proceed to Victoria Station, for High Level Station (London, Chatham, and Dover Railway), where special trains will be in waiting at four o'clock, to convey them to the Crystal Palace. After a visit to the palace and grounds, an informal dinner will take place in the concert room about seven o'clock.

Places of interest may be visited by members of the Congress, on conditions which can be ascertained at the office of the Reception Committee.

EXCURSIONS.

Friday, August 5th, 12.45 p.m.: Mr. John Penn will receive a certain number of the members of the Congress on board a special steamer at Charing-cross pier, in order to proceed down the river to Greenwich, and after luncheon there with Mr. Penn to visit the engine works of the Messrs. Penn, returning either by water or rail to Charing-cross.

Saturday, August 6th, 2 p.m.: Excursion to Folkestone. A certain number of members will leave Charing-cross Station by special train, provided free of cost by the South Eastern Railway Company, to witness the unveiling of the Harvey memorial-statue. After the ceremony the Mayor and Corporation of Folkestone will entertain the visitors at a banquet in the Town-hall. *2 p.m.:* Excursion to Hampton Court. Under the guidance of Dr. Langdon Down a party will visit Hampton Court Palace and Gardens, proceeding thence by river to Hampton Wick, where they will be entertained by Dr. Down at a garden-party at his residence, Normansfield. The members can reach Hampton Court either by the road, the river, or the rail. A special train will leave Waterloo Station (South Western Railway) at 2 o'clock.

Sunday, August 7th, 1.30 p.m.: Excursion to Boxhill. A special train will leave Victoria Station (Brighton and South Coast Railway) for Boxhill. At Burford Lodge, close to the station, Sir Trevor Lawrence, Bart., M.P., will receive a party of the members of the Congress at luncheon. The train will return from Boxhill to London at 6 P.M.

Monday, August 8th, 11 a.m.: Visit to the Docks, under the guidance and hospitality of Sir George Chambers,

chairman of the London, St. Katherine's, and Victoria Dock Company. A limited number of members will proceed to St. Katherine's Dock House on Tower-hill at 11 A.M., where the indigo and tobacco floors will be inspected, and, in the adjoining London Dock, the ivory, drug, spice, and wool floors, and also the largest wine vault. From the Shadwell basin a steamboat will then take the party, for whom Sir George Chambers will provide luncheon on board, down the river to the Victoria Docks. Having passed through the Royal Victoria and Royal Albert Docks, the party will return by the river to Charing-cross pier.

WILLIAM MAC CORMAC, Honorary Secretary-General.

MEDICAL NOTES IN PARLIAMENT.

IN the House of Lords on Monday several petitions were presented on the subject of vivisection, some praying for an alteration of the law regulating the practice, others for its total abolition.

In the House of Commons on Thursday, the 9th inst., on the motion of Mr. Dodson, a copy was presented of the memorandum of Dr. Buchanan, medical officer of the Local Government Board, on the present prevalence of small-pox in London among vaccinated and unvaccinated persons respectively.

The Artisans' Dwellings Acts.

On the motion of Sir R. Cross, the Select Committee on the working of these Acts was appointed as follows:—Mr. Courtney, Sir Sydney Waterlow, Sir Matthew Ridley, Mr. William Holms, Mr. Brodrick, Mr. Torrens, Sir Henry Holland, Mr. Bryce, Sir James M'Garel Hogg, Mr. Cropper, Viscount Emlyn, Mr. Francis Buxton, Mr. Arthur Balfour, Mr. Hastings, Mr. Rankin, Mr. Brand, Mr. Leamy, The O'Donoghue, and Sir Richard Cross.

Prevention of Floods.

On Friday the Select Committee on the Rivers Conservancy and Prevention of Floods Bill was nominated as follows:—Mr. Dodson, Mr. Sclater-Booth, Mr. Peel, Mr. Harcourt, Sir Andrew Fairbairn, Mr. Reginald Yorke, Mr. Arthur Arnold, Mr. Fellowes, Sir Robert Cunliffe, Mr. Compton Lawrance, Lord Edward Cavendish, Mr. Pell, Mr. Arnold Morley, Sir Rainald Knightley, Mr. Magniac, Mr. Stanhope, Lord Edmond Fitzmaurice, Mr. Levett, Mr. Hibbert, Mr. Pugh, and Mr. Arthur Balfour. Mr. Stanhope moved that the Committee have power to take evidence, but this was opposed by the Government on the ground that it would prevent the Bill passing this session, and on a division the motion was rejected by 116 to 63. The River Floods Prevention Bill was referred to the same Committee, as also were all petitions for or against either Bill.

London Fish Supply.

The following question was put down for Thursday:—Mr. Firth, to ask the Secretary of State for the Home Department whether he has yet received a reply to the letter addressed by him to the Lord Mayor in reference to London fish supply; whether he is able to communicate the tenor of such reply to the House; and whether, in case such reply is not satisfactory, he is prepared to initiate or suggest any measures for the improvement of the facilities and increase of supply of this important article of food.

Overworking Telegraph Clerks.

Lord Randolph Churchill will on Monday ask the Postmaster-General whether his attention has been called to the case of a telegraph clerk in the western district, who, in consequence of overwork, has become temporarily incapacitated from duty owing to mental derangement.

Dr. Cameron has secured the first place on the paper for Friday evening, July 8th, to call attention to the lack of capacity and resource displayed by the Local Government Board in dealing with the small-pox epidemic in London.

Dr. Farquharson will move the rejection of the Vivisection Abolition Bill, which stands for reading on Wednesday, July 13th.

The Contagious Diseases Acts.

Mr. Hopwood asked the Secretary of State for the Home Department whether it was the fact that three surgeons, acting under the Contagious Diseases Acts in the examination of prostitutes, had been appointed justices of the peace for the boroughs of Portsmouth, Windsor, and Southampton, respectively; would he give the dates of appointment; did these persons act as magistrates to enforce the Acts which they administered as officers; did they so act in court, or by private order; if so, was the right of appeal to a justice of the peace, which is given by the Acts in question to unfortunate women, secured to them; and would he intimate to these persons that they must make election between the duties of examining surgeons and justices.—Sir W. Harcourt said he had inquired into the matter, and received letters from the gentlemen in question. They were surgeons and justices of the peace. He would not trouble the House with the letters; but all three gentlemen stated in the most explicit way that they did not act as justices of the peace in any case connected with the Contagious Diseases Acts, and that they would think it highly improper on their part to do so.—In reply to Mr. O'Kelly, Mr. Forster stated that it was not intended to apply the Contagious Diseases Acts to Dublin.

Small-pox at Gravesend.

Mr. Findlater asked the Secretary of State for the Home Department if his attention had been called to the fact that small-pox having broken out in a street of small tenements in the borough of Gravesend, the medical officer of health made an application to the Mayor to get a magistrate's order for the removal of several fresh cases to certain huts which were last year built in an isolated country locality for the reception of those suffering from any contagious disease, which application was refused by his worship; and if the chief magistrate was justified in such refusal; and, if not, whether the Government would take steps to prevent a repetition of such refusal.—Sir W. Harcourt said he had received a telegram from the Mayor of Gravesend stating that an application was made under the 12th section of the Act of 1875, which only authorised the removal of children when they were without proper lodging and accommodation, and the magistrates, after considering the circumstances, did not think the case came within that section.

Mr. Warton has given notice of his intention to move the rejection of the Lunacy Law Assimilation (Ireland) Bill. On the order for going into Committee on the Infectious Diseases Notification (Ireland) Bill, Dr. Lyons will move to refer the Bill to a Select Committee.

On Monday, a petition was presented from the vestry of St. Pancras in favour of the Lunacy Law Amendment Bill.

The Alkali Bill.

In Committee on the Alkali &c. Works Regulation Bill, Major Nolan moved to exempt Ireland from the Bill, except as regards Dublin and other towns of 50,000 inhabitants. This was rejected by 140 to 16. Mr. Boord moved to include tar works in the schedule. Mr. Dodson replied that the Royal Commission indicated no means of dealing with tar works except simple inspection, and therefore they were not included in the Bill. Neither were some other kinds of works, in connexion with which no remedy had been discovered; but he hoped and believed that, in process of time, as remedies were discovered, the proprietors of those works would request that they should be added to the schedule of the Act. This answer being deemed unsatisfactory, a division was taken. Mr. Boord was followed into the lobby by 40 members, but the Government had 68 supporters, and the motion was consequently defeated. Earl Percy subsequently moved to include works for the manufacture of coke, lead, spelter, cobalt, &c., urging that they should be brought within the scope of the Bill, in anticipation of remedies being discovered; but the motion was negatived without a division, and the Bill passed the stage of committee, and was reported to the House amidst cheers. Mr. Callan and Mr. Biggar subsequently put down notices hostile to the Bill for the next stage.

Fines for Non-Vaccination.

On Tuesday, on the motion of Mr. Courtney, an address was agreed to for "an amended return to the Address of the Honourable the House of Commons, dated the 1st day of August, 1879, for 'returns showing the number of persons who have been imprisoned or fined for non-compliance with the provisions of the Act relating to the Vaccination of Children, distinguishing imprisonments and fines, the length of imprisonment undergone by such persons, the number of times any person has been imprisoned being more than once;

and of the number and amount of fines paid by any person who has been fined more than once for the above-mentioned offence.'"

Small-pox Hospitals.

On the motion of Mr. H. H. Fowler, a return was ordered showing the number of hospitals, whether temporary or permanent, provided for small-pox patients, under Section 37 of "The Sanitary Act, 1866," by the vestries and district boards in the metropolis, the situation of such hospitals, the year in which they were established, the number of patients which they are capable of accommodating, and the actual number of patients therein on the 13th day of June, 1881.

The Case of Thomas Titley.

Mr. H. B. Sheridan, put down for Tuesday, July 12th, his motion with regard to this case, as follows:—"That, in the interests of public morality, and for the protection of the constitutional rights of the people of this country, it is desirable that the police constables and all who aided and abetted them in the conspiracy to induce Thomas Titley, chemist, to commit the offence for which he is now suffering imprisonment, be forthwith prosecuted by the Public Prosecutor."

On Wednesday, a batch of petitions were presented in favour of the repeal of the Contagious Diseases Acts. Mr. Stansfeld's Bill, however, which stood for second reading to-day, was withdrawn, pending the report of the Select Committee.

Maintenance of Irish Lunatics.

The following notice was given for Thursday, 23rd inst.:—Mr. O'Shaughnessy, to ask the Chief Secretary to the Lord Lieutenant of Ireland, if he can hold out any hope that in allocating the cost of non-paying lunatics in Irish Lunatic Asylums the executive will, in cases where the district of the Asylum includes a county and a county of a city, so exercise the powers given it by statute as to avoid throwing on either portion of the district, exclusively of the other, the cost of non-paying lunatics who have been but a short time residing in such first-mentioned portion of the district; and whether he will consider the advisability of so exercising the aforesaid powers as to follow, between such portions of such district, the analogy of the law regulating the liability of different electoral divisions in the same union for the cost of the relief of in-door paupers.

Correspondence.

"Audi alteram partem."

WHO'S RIGHT, AND WHO'S WRONG?

To the Editor of THE LANCET.

SIR,—The old saying that there are even educated men who live in the world and not with the world, from failing alike to perceive the tendency of the age in which they live, and to apreciate the changes ocuring around them, apears to me to be admirably ilustrated by a leter which apeared in your journal of to-day from Mr. John Chippendale, headed "Dr. George Harley's Cacography," in which he biterly complains of the "great shock" I caused to his feelings by my having had my article on the "Germ Theory of Disease" printed without encumbering its words with useles duplicated consonants.

When Mr. Chippendale's leter is carefuly read, however, it becomes aparent that he is unaware of the fact that Speling Reform Asociations are rapidly springing up, both at home and abroad; that bishops and archbishops countenance them; that we are already on the eve of a great national speling reform movement; that what we were taught at school about English words being, as a rule, spelt upon etymological principles has been discovered to be contrary to fact, except in the case of technical terms, &c. In spite of the risk of giving a stil greater shock to Mr. Chippendale's sensitive nature, I wil venture to give him one or two glaring instances where English speling is not consonant with, *but contrary* to, etymological principles. Let me tel him, for example, that a "Jerusalem artichoke" has nothing whatever to do with the Holy Land, but gets its name—though certainly not its speling—from the Italian girasole! That Pegwel Bay Sandfire is even not corectly etymologicaly spelt when writen as Sampire, as it is a mere English coruption of the French noun for it—St. Piere. That his friend, the old lady's wig, has no conexion whatever with the "wigings" of his school days; but has actualy the marvelous audacity to be derived from "pileus," the Roman freeman's hairy cap. That the tawdry of his sculery maid comes directly from the dignified St. Aubrey; and so I might go on with endles variety of comon words to disprove Mr. Chippendale's asertion, but I wil merely recomend him to send 5*s.* to the Speling Reform Asociation, 20, John-street, Adelphi, and get the last year's number of its Journal, and also procure a copy of my book on the "Simplification of English Speling," published by Trübner & Co. at 2*s.* 6*d.*, as wel as the leter on "National Speling Reform" I adressed to the late Prime Minister, which Hodgson & Co. published in the shape of a sixpeny pamphlet; for I think it is a pity that when Mr. Chippendale feels himself reluctantly forced to break his wise resolution not to rush into print every time his eyes fal upon views not in exact acordance with his own, he should be so unfortunate as to do more injury to his own literary reputation than to his oponent's. I should advise him to console himself in future with the reflection that there is sound wisdom in the old German proverb which says, "Speech is silver; *silence* is gold."

In conclusion, although I dare not say that I feel pleased at having had the trouble forced upon me of replying to an inconsiderate leter, in order to prove that I bear no malice to its *wel meaning* author, I shal give him, as a parting gift, a piece of information which wil probably act as a sort of soothing plaster to his iritated feelings—namely, that the omision of duplicated consonants, while it in no wise detracts from the beauty of our language, has the imense advantage of saving much manual labour to literary men, and money to publishers. In proof of this I may tel him that it has been calculated—not by me, however—that by omiting duplicated consonants *The Times* newspaper would, in space, labor, and materials, efect a saving equal in amount to £10,000 a year!—Yours faithfully,

Harley-street, W., June, 1881. GEORGE HARLEY.

PHTHISIS AND HYDROPATHIC ESTABLISHMENTS.

To the Editor of THE LANCET.

SIR,—Struck by the singular heading to a letter in your issue of May 28th, I read and ultimately was able to identify the case referred to, and would now, with your permission, make a few additions from my case book to its clinical history.

W. O—— came on June 19th, 1880. A commercial traveller, aged twenty-five, but looking older, well developed, but yellow and tremulous. Had slight pain at the sternum ever since a fall while skating in January last, but paid no attention to it, until two or three weeks before a swelling appeared to the right of the sternum, and was the size of a hen's egg and pointing. For some time he had been perspiring excessively and losing weight, as much as 4 lb. in one week a fortnight ago; pulse 76; tongue flabby and covered with a whitish-yellow fur, bowels costive, urine frequently loaded with lithates; appetite good, but often bilious. Beer makes him ill, but he takes wines and spirits freely and smokes to excess. Treated as Dr. Williamson relates, improvement is recorded at each weekly consultation, until on July 23rd—in five weeks, not ten—he left "cured," according to the entry in the register of cases.

On September 22nd he returned, reporting himself as very well in health, with the exception of a small fistulous opening at the lower end of the manubrium sterni, discharging a little serum. In a few days he left again, not returning for three months, when (November 20th) he came with an abscess pointing rather higher; the tongue coated as at first; bowels costive; pulse 88, and weak; and much reduced in condition. This relapse, so far from showing a too faithful an adherence to dietetic restrictions, as Dr. Williamson would suggest, had followed on a return to the free living of "the road," the patient having meanwhile become strong and well enough to resume travelling. The liberal use of beer, wines, and spirits was owned to, also smoking to excess and taking late suppers. This visit was brief.

These particulars must be allowed to detract somewhat

from the typical character Dr. Williamson would attribute to the case, admitting as they do of a very different interpretation or moral from that advanced in his letter.

To keep up the strength under such circumstances is, of course, of great importance, but not less so is it to get the digestive organs right and the blood pure; and that the free exhibition of fat and oily foods was here contra-indicated, appears plainly from the improvement coincident with their restriction (not total prohibition). I regret much to find that through a mischance to the records of weight for that period, I cannot give the details of the improvement in nutrition implied in the result recorded.

Had the patient got worse during those five weeks of dieting and treatment instead of better, and had he improved on resuming a "liberal diet" later on, instead of relapsing, or had the result under Dr. Williamson's care been the opposite of that he unhappily has to record, the grounds of his conclusions would have been much better and the opposite opinion less tenable.

The case in some important particulars is unsatisfactory, and the absence of evidence of syphilis, or hereditary tuberculosis, may justly be held to lay increased responsibility on its management in the endeavour to account for the final result; but it is not unreasonable to suppose in view of its earlier history that the mode of management which answered so well at first might, if persevered in, have continued to do so, and permanent recovery secured. Errors there may have been—at Matlock or even at Ventnor, as elsewhere,—but when one undertakes to expose the shortcomings of another, he should at least be careful to ascertain all the facts, and should not let the sweep of his censure, if censure is meet, be wider than the facts warrant.

I am, Sir, yours faithfully,

Matlock, June 6th, 1881. W. B. HUNTER.

REMOVAL OF THE KIDNEY.

To the Editor of THE LANCET.

SIR,—In your issue of June 4th I observe the interesting account of "Removal of the Kidney for Nephrolithiasis." As you observe, this is not the first operation of its kind. The object of my present communication is twofold.

1st. To modestly point out that I believe I had the honour of first bringing this subject forward in England in an original paper, based upon experiment on rabbits, and read before the Pupils' Physical Society of Guy's Hospital, and for which I was awarded the first prize in 1869. The preparation for that paper (experiments, &c.) had occupied a great deal of my time for about eighteen months previously.

2nd. To notice its bearing upon vivisection. Now, throughout all those experiments (they were many, and all successful) I always placed the animal under chloroform, and spared no trouble to avoid pain. When the evening arrived for my paper I had many of my "victims" present to prove, if necessary, the success of the operation, but in deference to the expressed wish of the great number of my fellow students, who were assembled there at the time, I killed only *one* rabbit for a post-mortem demonstration, and yet in the face of this and other humane sentiments the public is apt to look upon the medical student as a hard-hearted wretch. I never found one to be so. But "good-bye" to experiments unless you happen to be one of the few privileged and licensed operators. Had the law for vivisection been in force at the time I should not, in all probability, be commenting on my paper on "Nephrotomy and Excision of the Kidney" now. Yours faithfully,

Trinity-square, S.E., June 7th, 1881. F. G. LARKIN.

Medical News.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on June 9th:—

Barton, Wm. Edwin, Shogswell Manor, Etchingham.
Bate, Henry Hele, Plymouth.
Braga, Joas Francisco, Bernard-street.
Prentice, Zacharia, Canterbury.
Smith, Gilbert Thomas Smith, Richmond-crescent.

The following gentlemen also on the same day passed the Primary Professional Examination:—

William Hamilton Hart, Guy's Hospital; Arthur Thos. Holdsworth, Queen's Hospital, Birmingham; Richard Pritchard Roberts, University College; Edward Tull Trevor, Guy's Hospital.

THE salary of Dr. Reid, Assistant Physician to the Royal Lunatic Asylum, Aberdeen, has been increased from £120 to £150 per annum.

THE BRITISH ASSOCIATION.—It has been resolved at a meeting of representatives of various educational institutions held in Birmingham, to invite the British Association to hold their annual meeting for 1883 in that town.

DR. SAMUEL CROMPTON, Consulting Physician to the Salford Royal Hospital and Dispensary, has presented a valuable collection of medical books to the committee of the Bolton Infirmary.

A MOVEMENT has been started to obtain subscriptions for the purpose of erecting a suitable memorial stone over the grave, in Allenvale Cemetery, of the late Dr. James Simpson, of Aberdeen.

THE proceeds of "Ye Old English Fayre," held last week at the Albert Hall, will, it is stated, enrich the funds of the Chelsea Hospital for Women to the extent of about £7540. The fair was revived by Mr. J. S. Wood, the secretary, under the title of "A graunde Fantesie Fayre and Olde Englyah Cheape," at Bolingbroke House, Wandsworth-common, on the 16th, 17th, and 18th inst., for the Bolingbroke House Pay Hospital.

BEQUESTS AND DONATIONS TO MEDICAL CHARITIES. Mr. H. W. Eyres, late of Grosvenor-street, bequeathed £250 to the Leeds General Infirmary. Mr. James Farrar, late of Halifax, Yorkshire, bequeathed £500 to the Halifax Infirmary and Dispensary. The National Hospital for Consumption, Ventnor, has received a legacy of £1000, free of duty, from the late Major C. S. Barron, and one of £300, less duty, from the late Miss Martha Relfe.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—On Whit-Monday the following office-bearers were elected for the ensuing year:—President: Samuel Chaplin. Vice-President: John Kellock Barton. Secretary: William Colles. Council: Wm. Colles, Alfred H. McClintock, George H. Porter, George H. Kidd, William A. Elliott, T. Jolliffe Tufnell, Edward Hamilton, Rawdon Macnamara, Robert McDonnell, Edward D. Mapother, Archibald H. Jacob, Edward Hallaran Bennett, Philip Crampton Smyly, John Denham, Anthony H. Corley, William Stokes, Henry R. Swanzy, W. T. Stoker, and William J. Wheeler. One hundred and six Fellows voted at the election.

IRISH MEDICAL ASSOCIATION.—The following office-bearers have been elected for the ensuing year:—President: John T. Banks. Vice-Presidents: Parsons Berry, Bellew Kelly, William Miller, and H. O'Farrell. Council: J. Wallace Boyce, Robert Browne, J. H. Chapman, H. G. Croly, Thomas Darby, Thomas Drapes, Alexander Filson, R. Gray, J. R. Harvey, Robert Hayes, A. Jacob, David Jacob, George H. Kidd, Richard John Kinkead, James Martin, R. McDonnell, F. V. McDowell, James Maloney, G. Morrogh, Andrew Nolan, C. Norman, William Perceval, James F. Pollock, George H. Porter, Thomas Purcell, J. Ridley, Edmund P. Sharkey, H. J. Smith, John Spencer, Robert Tagert, W. Thomson, and John Lennon Walshe. Auditors: Albert Croly and H. C. Tweedy. Hon. Secretary: Albert O. Speedy.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning, at the latest.*

BARKER, H. M., M.B., M.R.C.S.E., L.R.C.P., has been appointed Medical Officer and Public Vaccinator to the Brading District of the Isle of Wight Union, vice C. Meares, resigned.

BIRCH, G., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer to the Hackney Union, vice Long, resigned.

CHESHIRE, Mr. H. F., has been appointed Public Analyst for the Borough of Rye.

COOKE, E. M., M.B., M.R.C.S.E., has been appointed Medical Superintendent of the County and City of Worcester Lunatic Asylum, Powick, vice Sherlock.

COOPER, W., M.R.C.S.E., L.S.A.L., has been elected House-Surgeon to the Croydon General Hospital, vice T. T. Newman, L.R.C.P.L., M.R.C.S.E., resigned.

DEANE, E., L.F.P.S.G., L.S.A.L., has been appointed Medical Officer to the Second District of the Shepton Mallet Union.

EADON, W. F. B., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer to the Fifth District of the Barton Regis Union.

FOSTER, N. S., M.D., C.M., has been appointed Medical Officer to the Stoke Lyne District of the Bicester Union.

GAMGEE, J. S., F.R.S.Ed., M.R.C.S.E., has been appointed Consulting Surgeon to the Queen's Hospital, Birmingham.

HAMILTON, R., M.B., C.M., has been appointed Medical Officer for the Rytherwith Ozendike District of the Tadcaster Union.

HILLIARD, H. C., M.D., L.R.C.P.L., M.R.C.S.E., has been appointed Medical Officer to the Caterham District of the Godstone Union.

HOPE, E. W., M.B., B.Sc., L.R.C.P.L., has been appointed Resident Medical Officer to the Netherfield Fever Hospital, Liverpool, vice W. Rushton Parker, B.A., M.B., M.R.C.S.E., resigned.

JACK, J. S., M.B., C.M., has been appointed Medical Officer to the Rothbury East District of the Rothbury Union.

JONES, J. D., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer for the Shebbear District of the Torrington Union.

MARSH, T. A. P., M.R.C.S.E., L.R.C.P.L., has been appointed House-Surgeon to the Weston-super-Mare Hospital, vice Rowlands, resigned.

MAY, B., M.B., F.R.C.S.E., has been appointed Honorary Surgeon to the Queen's Hospital, Birmingham, vice Gamgee, resigned.

MOORE, Mr. E. H., has been reappointed Public Analyst for the Western Division of the County of Sussex.

SHEMILT, G. R., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer to the Third District of the Highworth and Swindon Union.

SMITH, C. R., M.B., M.R.C.S.E., has been appointed Surgeon to the Eye Infirmary, Wolverhampton.

THOMSON, A., M.B., C.M., has been appointed Assistant Medical Officer to the Montrose Royal Lunatic Asylum, vice W. J. Dodds, M.D., resigned.

WATTS, T. F., M.B., C.M., has been appointed Assistant Medical Officer to Her Majesty's Prison *Walton*, Liverpool.

Births, Marriages, and Deaths.

BIRTHS.

BIRCH.—On the 8th inst., at Sussex House, Downs-road, Lower Clapton, the wife of George Birch, Esq., M.R.C.S.E., of a daughter.

CHARLES.—On the 7th inst., at West Cromwell-road, South Kensington, the wife of T. Cranstoun Charles, M.D., of a son.

DUKE.—On the 15th inst., at 1, Cavendish-terrace, Clapham-common, the wife of Benjamin Duke, M.R.C.S.E., of a daughter.

EAGER.—On the 14th inst., at the County Asylum, Melton, Suffolk, the wife of Wilson Eager, Medical Superintendent, of a son.

IRONSIDE.—On the 7th inst., at Highbury New Park, the wife of R. A. Ironside, M.B., of a son.

NICHOLLS.—On the 2nd ult., at Dominica, West Indies, the wife of H. A. Alford Nicholls, M.D., of a daughter.

RICE.—On the 5th inst., at Friar-gate, Derby, the wife of George Rice, M.R.C.S.E., of a son.

MARRIAGES.

BIRD—FREELAND.—On the 9th inst., at All Saints', Paddington, Peter Hinckes Bird, F.R.C.S., F.L.S., of Norfolk-square, W., to Rosa M. Freeland, of Ovington-gardens, South Kensington.

CLARKE—ALEXANDER.—On the 8th inst., at Glasgow, Henry J. Clarke, M.B., C.M., M.R.C.S.E., of Doncaster, to Isabella Margaret, youngest daughter of T. Alexander, Esq., of Glasgow.

FORSYTH—RAYNER.—On the 8th inst., at the Parish Church, Birstall, by the Rev. John Kemp, M.A., Vicar, assisted by the Rev. F. T. White, M.A., Curate, Robert Adam Forsyth, M.D., to Annie Marguerita, younger daughter of Robert Rayner, Esq., M.R.C.S.E., of Newstall, Birstall.

MORGENROOD—REID.—On the 8th inst., at Anerley Congregational Church, William George Morgenrood, M.B., C.M., L.R.C.S., &c., second son of Philip D. Morgenrood, of Wynberg, Cape of Good Hope, to Jessie Wardlaw, second daughter of William Wardlaw Reid, of Selhouse Park, South Norwood.

MUIR—BOSCAWEN.—On the 8th inst., at Marchwiel Church, Denbighshire, James Claudius Pollock Muir, L.R.C.P.Ed., L.R.C.S.Ed., to Isabella Nina, eldest daughter of the Rev. W. H. Boscawen, Rector of Marchwiel, and Rural Dean.

DEATHS.

GIBBON.—On the 2nd inst., at Pevensey-road, St. Leonards-on-Sea, Anne, widow of the late James Gibbon, M.D., of Windsor Lodge, Swansea, and daughter of the late Rev. Robert Wynter, Rector of Penderyn, Breconshire, aged 86.

JONES.—On the 15th inst., at his residence, Sydenham-park, Edward Jones, M.D., aged 69.

MATTHEWS.—On the 3rd inst., at his residence, The Acacias, Dover-court, Arthur Matthews, M.R.C.S.E. (formerly of Robertsbridge, Sussex), aged 75.

N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths*

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

NOMINATION COMMITTEE.—Sir JAMES PAGET, Bart., Chairman.

THE Committee, consisting of Messrs. Birkett, Savory, Marshall, Wood, Forster, Hutchinson, the President, and the Vice-Presidents, in pursuance of the resolution of the Council of the 13th ultimo, have taken into consideration the regulations under which the committee shall act in nominating candidates for election to College Examinerships, and have agreed to the following recommendations:—

I. Constitution and Duties of the "Nomination Committee."—1. The Nomination Committee shall consist of seven members of the Council, together with the president and vice-presidents, and not less than three members of the committee shall be, or shall have been, members of the Court of Examiners. 2. The duties of the Nomination Committee shall be as follows:—(*a*) To consider applications from candidates for the offices of Examiner in Anatomy and in Physiology, in Medicine, in Midwifery, and for the Dental Section of the Board of Examiners in Dental Surgery; to report thereon to the Council; and to recommend the candidates deemed fittest for election. (*b*) To be visitors of the examinations in Anatomy and Physiology, in Medicine, in Midwifery, and in Dental Surgery. (*c*) To make representations and recommendations to the Council respecting the aforesaid examinations. 3. The members of the Council appointed members of the Nomination Committee shall be ineligible for any of the before-mentioned examinerships.

II. Notices respecting Elections, and Mode of Election of Examiners.—1. Notice of intending elections to the examinerships shall be advertised in medical journals not less than one month prior to the date of those elections; and candidates shall be invited to send in their applications to the secretary not less than fourteen days prior to the date of election. 2. The secretary shall forward to each member of the Council a list of all the candidates applying for the office of examiner within seven days of the expiration of the period to which the application of candidates has been limited. 3. Every member of the Council shall receive notice of each meeting of the Nomination Committee for considering applications for the office of examiner, and shall be at liberty to nominate in writing to the secretary, before or at each such meeting, others than those applying as candidates for the said office. 4. The names of all candidates for the office of examiner, and the names of the candidates recommended by the Nomination Committee for the said office shall be inserted in the notice issued to the Council for the meeting appointed for the election.

III. Absence of Examiners.—1. In the event of any examiner being, through illness or any other unavoidable cause, unable to take part in any examination, the Nomination Committee shall be authorised, on behalf of the Council, to appoint a substitute for such examiner, reporting thereon to the next meeting of the Council.

IV. Number, Qualifications, and Duration of Office of Examiners.—1. The Board of Examiners in Anatomy and Physiology shall consist of nine members, to be appointed by the Council, to conduct the examinations in Anatomy and Physiology for the Membership and the Fellowship of the College. 2. The examiners in Anatomy and Physiology shall be elected annually from the Fellows of the College. 3. An examiner in Anatomy or in Physiology shall not hold office for more than five consecutive years, but after an interval of one or more years shall again be eligible for election. 4. The chairman of the Board shall be elected annually by the members of the Board, and shall be chosen from that section of the Board, either Anatomical or Physiological, of which the members shall at the time constitute the majority of the Board. 5. The four examiners in Medicine shall be chosen from the Fellows of the Royal College of Physicians, and shall be elected annually at the Quarterly Council in July. 6. An examiner in Medicine shall not hold office for more than five consecutive years, but after an interval of one or more years shall again be eligible for election. 7. The two examiners in Midwifery shall be chosen either from the Fellows of the College or from the Fellows of the Royal College of Physicians, and shall be elected annually at the Quarterly Council in July. 8. An examiner in Midwifery shall not hold office for more than five consecutive years, but after an interval of one or more years shall again be eligible for election. (N.B.—The regulation limiting the period of office for any examinership to five consecutive years may, upon special recommendation of the Nomination Committee and the approval of the Council, be suspended.) 9. A member or members of the Dental Section of the Board of Examiners in Dental Surgery shall, as provided by the by-laws, be elected from "persons skilled in dental surgery," and shall hold office "for the period of five years."

ERASMUS WILSON TRUST.

In pursuance of the resolution of the Council of March 10th, 1881, the president and vice-presidents have to report to the Council that they have taken into consideration the changes proposed in the Erasmus Wilson Trust, so as to provide that the proceeds of the fund shall be more advantageously employed than at present by appropriating them, in such proportion as the Council may from time to time determine, in part towards the payment of the salary of a pathological curator of the museum and in part for the payment of lectures or demonstrations on the pathological contents of the museum, to be given either by the pathological curator or some other person duly appointed for the purpose; that they have consulted the legal adviser of the College on the subject, and, in accordance with his opinion, have instructed him to prepare a new deed, setting forth the objects of the Trust in its altered conditions, releasing the existing trustees from their obligations under the present Trust, and transferring to the College in its corporate capacity the observance of the conditions of the Trust so altered; and that the new deed will shortly be ready for execution. The president and vice-presidents have farther to report that, in view of the proposed changes, they recommend to the Council that all regulations at present in force relating to the Erasmus Wilson Trust be rescinded; and that it be referred to the Museum Committee to inquire and report to the Council on candidates for the office of pathological curator of the museum, and on the regulations under which that office shall be held.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET OFFICE, June 16th, 1881.

Date.	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Dry Bulb	Wet Bulb	Solar Radia in Vacuo	Max. Temp Shade	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
June 10	30·21	N.E.	52	47	96	63	43	..	Bright
,, 11	30·00	S.W.	56	49	92	67	47	..	Cloudy
,, 12	30·18	W.	62	57	110	73	52	..	Cloudy
,, 13	30·06	N.W.	60	53	106	73	52	..	Hazy
,, 14	30·06	E.	58	52	94	69	51	..	Hazy
,, 15	29·99	W.	62	55	94	72	50	..	Hazy
,, 16	29·97	S.W.	63	57	98	73	55	..	Cloudy

Medical Diary for the ensuing Week.

Monday, June 20.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS. — Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; on Tuesday, 9 A.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Professor Jonathan Hutchinson, "On the Laws of Inheritance in Relation to Disease."

Tuesday, June 21.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.
SANITARY INSTITUTE OF GREAT BRITAIN.—8 P.M. Professor W. H. Corfield, "On the Present State of the Sewage Question."

Wednesday, June 22.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL. — Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL. — Operations, 1½ P.M., and on Saturday at the same hour.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL. — Operations, 2 P.M., and on Saturday at 1 P.M.
LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL. — Operations, 2 P.M., and on Saturday at the same hour.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN. — Operations, 2½ P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Professor Jonathan Hutchinson, "On the Laws of Inheritance in Relation to Disease."
EPIDEMIOLOGICAL SOCIETY.—8 P.M. Mr. H. V. Carter, "Contribution to the History of the Epidemic Fever prevailing in the Country Districts of the Bombay Presidency during the Famine Period of 1876-78."—Mr. J. Mackie, "Report on Dengue Fever."—Mr. V. B. Barrington-Kennett, "On a System of Detached Floating Barracks for the Formation of a Small-pox or Fever Hospital."

Thursday, June 23.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—1½ P.M. Surgical Consultations.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL. — Operations, 2 P.M., and on Friday at the same hour.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2½ P.M.

Friday, June 24.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 2 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
QUEKETT MICROSCOPICAL CLUB.—8 P.M. Mr. B. W. Priest, "On a New Species of Sponge from Honduras."
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Professor Jonathan Hutchinson, "On the Laws of Inheritance in Relation to Disease."

Saturday, June 25.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

Notes, Short Comments, and Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.
Local papers containing reports or news-paragraphs should be marked.
Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.
Lectures, original articles, and reports should be written on one side only of the paper.
We cannot prescribe, or recommend practitioners.
All communications relating to the editorial business of the journal must be addressed "To the Editor."
Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

QUACKS IN JAPAN.

THERE are, it appears (says the *Japan Weekly Mail*), no less than 65,200 doctors practising in Japan, of whom 504 only have received legitimate diplomas, and of these latter 50 are denizens of Tokiyo. It follows, therefore, that there are 64,696 individuals playing fast and loose with the lives of their fellow-creatures throughout the country—that is to say, an average of one quack to 470 quacked.

M. E.—We have no recollection of the paper.

A Fellow.—If our correspondent has not signed the by-laws he will not be allowed to record his vote. No opportunity will be afforded before the annual meeting.

Inquirer.—We should recommend our correspondent to address one of the professors at Netley.

DEATH FROM ETHER.

To the Editor of THE LANCET.

SIR,—In view of the recent controversy, "Ether v. Chloroform," I think it specially desirable that untoward results should be published. I therefore send the account of a case of death from ether administration that recently came under my notice.

On the evening of March 8th I was requested by my colleague, Mr. Brummitt, to visit with him a case of diphtheria, he having tracheotomy in view for the urgent dyspnœa that was threatening life. We decided that the only chance was in operation, and I proceeded to administer ether. The patient, a girl of six years, somewhat mentally deficient and of delicate habit, was labouring for breath. The pulse was fair. I used a cage inhaler, putting into it about half an ounce of ether. The inhaler was at first held some three inches from the face, so as to gradually accustom the child to the vapour. It was by degrees approached closer, and then placed over the nose and mouth. There was a good deal of struggling, but the patient soon became quiet, and seemed to be getting comfortably under its influence. I reported her as nearly ready, and my colleague placed her in tracheotomy position. Having replenished the inhaler, I was proceeding with the administration when the breathing, which, though not very satisfactory, had been tolerably regular up to this moment, suddenly ceased. Artificial respiration was at once resorted to. The patient gave one gasp, and all efforts for restoration, though persevered in for some time, were unavailing; the heart could be felt feebly flickering for some two minutes after the breathing failed.

Having either administered or witnessed the administration of anæsthetics in several similar cases, it seems conclusive that their use in such is attended with more than ordinary risk. In one in which chloroform was used the patient died as soon as the operation was completed; but as the child was almost comatose at the commencement, it is perhaps hardly fair to attribute the result to the anæsthetic. In two others ether was used, and the danger appeared imminent.

Should I again have to produce anæsthesia in similar cases, I think I should give chloroform the preference. Ether is supposed to cause death by paralysing the respiratory powers. In laryngeal diphtheria these are greatly overtaxed, consequently is not the danger increased by this anæsthetic? Another thing in favour of chloroform is that there is usually less struggling when it is used. In employing these agents in cases where there is any respiratory obstruction it seems to me a good precaution to give the minimum quantity required to produce narcosis. In this particular instance the ether was from a sample which I have used a good many times without any unpleasant symptoms arising, and it seems remarkable that such a result should occur from so small a quantity.

I am, Sir, yours, &c.,
JOHN J. SANGSTER, M.R.C.S., &c.

Burra, S. Australia, April 9th, 1881.

GOYDER'S CLINICAL STENCIL PLATES.

To the Editor of THE LANCET.

SIR,—I beg to thank you for the honour you have done me in noticing the above. Before the issue of the number for June 4th I was quite unaware of the fact that anyone had contemplated the use of stencilling in clinical work. The novelty I claim, however, is the combination of diagrams, and the plan of obtaining outlines of opposite bones and limbs by reversing the plate. May I be allowed to state also that the woodcuts published are one-half the actual size? I regret that in consequence of absence I have been unable to write this note sooner.—Apologising to you for the delay, I have the honour to be, Sir, yours very truly,

C. M. GOYDER,
Senior House-Surgeon.

June 14th, 1881. Newcastle-on-Tyne Infirmary.

SIMPLE METHOD FOR REDUCTION OF DISLOCATION OF SHOULDER-JOINT.

To the Editor of THE LANCET.

SIR,—In your issue of May 28th, Dr. S. R. Macphail calls attention to the ease with which dislocation of the humerus can, in most cases, be reduced by manipulation, and in doing so speaks of this method as if it were new, stating that although he "does not claim originality for it," it is a method "to which he has never seen any reference in the ordinary text-books." This is remarkable, when we notice that the method described by him is almost—if not altogether—identical with that described by Abernethy many years ago, called "Reduction by Stratagem," and the first-mentioned mode of treatment for luxation of the humerus, given in Bryant's "Practice of Surgery," second edition (1876). Mr. Bryant, however, here accompanies his description of reduction by this means with the remark, "To reduce a dislocation of the humerus by manipulation chloroform is essential." Whether this erroneous sentence is retained in the later edition of Mr. Bryant's admirable work I cannot say, not having it within reach.

Your correspondent will also find that Mr. Holmes, in his "Principles and Practice of Surgery," gives a short account of reduction by manipulation without mentioning chloroform in connexion therewith.

Reduction of the dislocated humerus by manipulation was—if my memory serves me aright—described in a minute and exhaustive manner by Professor Gordon of Belfast in a small work published six, eight, or more years since, entitled "Fractures of the Radius, &c."

Dr. Gordon describes different methods of procedure for the different forms of displacement, in order to avoid the ligamentous structures surrounding the joint, just as Bigelow does for the various dislocations of the hip, and teaches that the great majority of recent cases may be reduced by this method without the aid of an anæsthetic, and certainly in his hands it is almost always successful.

I have not Mr. Erichsen's work to hand, but would venture to say from memory that he also clearly describes manipulation as a frequently successful mode of reduction of the shoulder.

I am, Sir, yours very truly,
S. A. K. STRAHAN, M.D.

East Riding Asylum, June 1st, 1881.

Mr. Collier.—The list published by us last week is correct. Our correspondent had better communicate with the secretary of the College on the subject.

Messrs. Findlay and Co.—Curling or Allingham (Churchill) for diseases of the rectum; for intestines generally, Habershon.

"TEMPERANCE AND THE DOCTORS."

To the Editor of THE LANCET.

SIR,—This afternoon, in reading the current number of THE LANCET, I found a note bearing the above heading. Now, you will, I am sure, permit me to say that the short and imperfect reports of speeches and lectures found in newspapers sometimes convey the very reverse of what was really said, and the comments you are good enough to make on some speech attributed to me are very remotely applicable to anything I have ever said on the public platform, nor do they apply in any measure to anything I have ever said at Yeovil, seeing that I never in my life spoke at Yeovil, nor do I even know the name of the vicar of that town.

In justice to myself, I may surely add that I have on many occasions maintained that medical men have done much to check intemperance—more, indeed, than any other profession; and I have several times attempted to show that the members of the profession have not the comparative leisure of the clergy, nor the commanding authority and independent position of bishops, judges, and Ministers of State. This I think no one will deny; nor do so many men of rank and large fortune enter our profession as are found in one or two others.

Lastly, any remarks I may have made on three or four recent occasions that medical men are overworked and often underpaid, and not treated generally with the respect to which I have contended they are entitled, seem to me a defence of the profession, and in no sense an attack upon it. If the report of the speech in any way justified your comments, it certainly bears very small resemblance to any utterance of mine.—I have the honour to be, Sir, yours faithfully,

Wimborne, June 8th, 1881. ALFRED J. H. CRESPI.

*** We gladly insert our correspondent's letter. It would be well if he would write in correction of the report of his speech to the editor of the *Western Gazette*.—ED. L.

"ATTENDANCE ON CASES OF SUDDEN ILLNESS."

To the Editor of THE LANCET.

SIR,—People of all classes frequently labour under the delusion that a medical man can be compelled to attend at any time, especially in chance cases of midwifery. My experience has taught me that if he goes he will have to trust to providence for his fee.

People who take their sick to the hospital, &c., as out-patients, when they perceive danger, rush off at any hour to the nearest medical man, as they know a death certificate cannot be obtained from the officers of the institution, and probably they are too late to get an order from the parochial relieving officer.

Would it not be very satisfactory if people could have the privilege of calling in the aid of the first policeman to be found, and for him to give an order for immediate medical attendance, payable by the authorities as at present in cases of accident or sudden illness in the streets, and subsequently for the police to find out whether it was a case for the parochial medical officer?

I think such an order would be the means of preventing many unnecessary inquests, prevent many medical men from annoyance and low abuse, and, at the same time, a fair remuneration would be certain.

I am, Sir, yours faithfully,
G. D. HARDING, M.R.C.S., &c.

Lorrimore-street, S.E., May 28th, 1881.

THE HEADS OF THE PEOPLE.

To the Editor of THE LANCET.

SIR,—Hatters have discovered that the human head is decreasing in size. From practical experience they can testify that hats are made of a much smaller size at the present day than they were twenty-five or fifty years ago.

In a body of men like our soldiers and police the sizes run very small in many instances, although in these cases the men are often tall and well proportioned. The sizes of the heads of professors, doctors, &c., are always larger than those of the general public. Burns had a head 7¼ in. in size. Formerly the size of the hats sold was frequently from 7½ to 7⅞ in., whereas now the average demand is for hats from 6¾ to 6⅞ in. What is the cause of this? Perhaps some members of the medical profession may be able to throw some light upon this important question.

I am, Sir, yours truly,
Wolsey-road, N., June, 1881. W. H. SMITH.

Query.—1. Assuredly not.—2. The offices of the Medical Defence Association are in Colebrooke-row, Islington, N.

Kestrel.—On application, personally or by letter, to the National Vaccine Institution, Local Government Board, Whitehall. No charge is made.

C. A. L.—12, Colebrooke-row, N.

Mr. G. A. Wright (Pendlebury).—The paper will appear shortly.

A Young Practitioner.—1. Bristowe, Roberts, Tanner.—2. Barnes, Lombe Atthill.

CHLOR'L v. STRYCHNIA.

To the Editor of THE LANCET.

SIR,—The following facts may be of some interest to your readers. On May 25th I found a pet fox-terrier bitch suffering from severe symptoms of strychnia poisoning. There were well-marked risus sardonicus and opisthotonos, with much rigidity of the limbs. She was lying on her side, totally unable to get up, and the respiration was 90 to the minute. I gave her immediately a draught of bromide of potassium and chloral (thirty grains of each), but owing to the spasmodic movements of the head, I failed to get it all down. I then gave her sixty grains of chloral (in crystals) on the tongue, and held her mouth until it was dissolved. She gradually went to sleep, and three hours after was able to walk, although with a good deal of weakness about the hind legs, and she has since gone on slowly to recovery.—I am, Sir, yours obediently,

Melton Mowbray, June 2nd, 1881. E. R. MANSELL.

A HINT TO CHLOROFORMISTS.

To the Editor of THE LANCET.

SIR,—When in Paris I was invited by Dr. Labbé to assist in a case of ovariotomy at a private hospital. The patient was given chloroform. When the anæsthesia was complete, the surgeon made his incision in the linea alba, through the skin and circular tissue. Suddenly the respiration stopped, and the heart ceased to beat, as clearly shown by the cessation of bleeding and the bloodless appearance of the lips of the wound. The mouth was cleansed from mucus, the tongue drawn forwards, the patient's head thrown well back, and artificial respiration was practised for quite ten minutes, but without result. The case appeared desperate, when Dr. Labbé put a large cloth in boiling water and applied it to the cardiac region. Instantly the heart commenced to beat and the patient to respire. She was saved. The operation was not terminated.

The cloth which had been applied was of such a heat that a large blister was raised at the seat of its application. Such simple and ever at hand means, which has succeeded several times with Dr. Labbé, may be unknown to a few of your readers, and possibly useful to all.

I am, Sir, yours &c.,
Great Russell-street, W.C., June 1881. ADOLFO PAGGI, M.D.

Dr. Davis.—The festival of the Fellows will take place the same evening at the Albion Tavern, when Mr. William Cadge of Norwich, a member of the Council of the College of Surgeons, will take the chair. Mr. B. T. Lowne is the honorary secretary.

Dr. M. W. Taylor (Penrith).—We shall be glad to receive the paper.

"THE COMMISSIONERS IN LUNACY AND ASYLUM REPORTS."

To the Editor of THE LANCET.

SIR,—No one of the leading men amongst asylum superintendents having noticed your annotation in THE LANCET of June 4th on the above subject, I venture to claim the favour of a little space for a few remarks.

The annotation in question indicates an extraordinary misapprehension of the case, and, with regard to private asylums at any rate, completely inverts the facts. The reports, it says, "have come to be nothing more or less than testimonials left with the authorities of asylums in return for the courtesy shown during an inspection." So far is this from fact that the key-note is rather that of blame than praise. The Commissioners have enormous power under the Lunacy Acts. They are apt to exercise it in framing their reports in a harsh, arbitrary, and capricious way. Proprietors of asylums are accused, convicted, sentenced, and punished without being arraigned, without means of defence, without opportunity of stating their case or rebutting unjust charges. It happens thus. The reports to which your annotation refers are crammed with frivolous complaints. These complaints are published in the Annual Blue Books. They become public property; newspapers extract them, and found upon them virulent attacks on private asylums. Authors quote them for the same purpose, as, for instance, Dr. Bucknill. This writer, eminent indeed, but *inops humanitatis atque inurbanus*, has in the sixth chapter of his work, entitled "The Care of the Insane," culled, without any attempt at comparison or contrast, a crop of these complaints from the Blue Book of 1875. He nowhere stops to inquire into the possible justice or injustice of the complaints. It is a clear case of the *argumentum ad populum*. However, let that pass. The point to be observed is that the use made in this and other instances of the complaints in question well illustrates the nature of the hardship which proprietors of asylums suffer. They are punished on mere accusation, without inquiry or proof. It is surely a punishment, and a very severe one, to be thus spitted in official documents, and to have the accusations published and ready to hand for anyone to extract and use at pleasure, and to cite as if they were fair and judicial condemnations.

The complaints, it must be remembered, are *ex parte* statements of visiting commissioners, prone by the nature of their office to fault-finding. When the statements get into the Blue Books there is no redress. The Board in Whitehall-place is inexorable, and there is no appeal. Asylum proprietors are far more harshly treated than the commonest and lowest publicans. Even they can claim to have their case heard. They may defend themselves in court. Before their licences are endorsed they are duly warned. Asylum proprietors' licences are endorsed without warning upon the mere *ipse dixit* of a couple of visiting commissioners, who may be by disposition capricious and harsh, or who may be suffering from indigestion or fatigue, or other causes of irritability, ruffled temper, and warped judgment. Surely no other class of men in the kingdom is placed under so arbitrary a rule as private asylum proprietors, or one so severely administered. Your annotation, therefore, as far as regards them, is erroneous and misleading.

These remarks are strictly limited to private asylums. The superintendents of public asylums have perhaps a good answer to give. If so, let them give it themselves; let them state their own case.

"Herr gib Regen und auch Sonnenschein
Für Reitz, Kreitz, und Lobenstein
Woll'n die Andern auch was ha'n
Soll'n sie dir es selber sa'n."

I am, Sir, yours, &c.,

June 14th, 1881. G. F. BODINGTON.

"THE BLOOD OF SAINT JANUARIUS."

To the Editor of THE LANCET.

SIR,—In vol. i., p. 301, of Salverte's "Philosophy of Magic, Prodigies, and Apparent Miracles," translated by Anthony Todd Thompson, M.D. Lond., is given the following account of the apparent miracle:—"In the present day, at an annual public ceremony at Naples, some of the blood of St. Januarius, collected and dried centuries ago, becomes spontaneously liquefied, and rises in a boiling state to the top of the phial that encloses it. These phenomena may be produced by reddening sulphuric ether with orcanette [alkanet root] (*enoema*, Linn.), and mixing the tincture with spermaceti. This preparation, at ten degrees above the freezing point (*Centigrade*) [F. 50°] remains condensed, but melts and boils at twenty [F. 68°]. To raise it to this temperature it is only necessary to hold the phial which contains it in the hand [or near a lighted lamp] for some time. If a little simple jugglery be combined with this philosophical experiment, the apparent miracle is complete."

I am, Sir, yours, &c.,

Dublin, June 11th, 1881. A. S.

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The Asylum Journal (Berbice), Morningside Mirror, Italian Times, Warehousemen and Drapers' Trade Journal Courier, Western Daily Press, Barnsley Chronicle, Evesham Journal, Barnsley Times, Glasgow Herald, &c., have been received.

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